

# Recipe Book for Medication-Assisted Treatment (MAT) Integration

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# Disclaimers and Appreciation

- I do not receive any funding—honoraria, contractual, research, or otherwise— from any pharmaceutical or healthcare company
- I do not have investments or ownership in any pharmaceutical or healthcare company
- Many of the graphical slides in today's presentation are from **PCSS-MAT (the Providers' Clinical Support System for Medication Assisted Treatment)**. I appreciate the use of these materials in today's presentation.

# Recipe Book for MAT Integration

## Teaching Objectives

- To understand the optimal staffing and patient care models for MAT services
- To learn about critical training and logistical issues needed for implementation
- To discuss common system and patient-care challenges with starting MAT services

# Definitions of Addiction

- Is a primary, chronic disease of brain reward, motivation, memory and related circuitry that leads to characteristic biological, psychological, social and spiritual manifestations—ASAM
- Is a mental, physical, and spiritual disease—Big Book of AA
- Is a chronic, relapsing brain disease that is characterized by compulsive drug seeking and use, despite harmful consequences—NIDA

An addict is not a *bad* person trying to get *good*,  
but is a *sick* person trying to get *well*

# DSM-5 Criteria for Substance Use Disorder: Recommendations and Rationale

	DSM-IV Abuse <sup>a</sup>		DSM-IV Dependence <sup>b</sup>		DSM-5 Substance Use Disorders <sup>c</sup>	
Hazardous use	X	} ≥1 criterion	-	} ≥3 criteria	X	} ≥2 criteria
Social/interpersonal problems related to use	X		-		X	
Neglected major roles to use	X		-		X	
Legal problems	X		-		-	
Withdrawal <sup>d</sup>	-	X	X			
Tolerance	-	X	X			
Used larger amounts/longer	-	X	X			
Repeated attempts to quit/control use	-	X	X			
Much time spent using	-	X	X			
Physical/psychological problems related to use	-	X	X			
Activities given up to use	-	X	X			
Craving	-	-	-	X		

## Figure Legend:

**DSM-IV and DSM-5 Criteria for Substance Use Disorders<sup>a</sup>** One or more abuse criteria within a 12-month period and no dependence diagnosis; applicable to all substances except nicotine, for which DSM-IV abuse criteria were not given.

<sup>b</sup> Three or more dependence criteria within a 12-month period.

<sup>c</sup> Two or more substance use disorder criteria within a 12-month period.

<sup>d</sup> Withdrawal not included for cannabis, inhalant, and hallucinogen disorders in DSM-IV.

Cannabis withdrawal added in DSM-5. **SEVERITY INDICATORS:** Use number of criteria met (from 2 to 11) as an overall severity indicator mild (2-3 criteria), moderate (4-5), and severe (6 or more) disorders.

# Recipe Book for MAT Integration

## Introduction to MAT

- MAT stands for Medication Assisted Treatment for addictive disorders or substance use disorders (SUDs)
- Currently refers to FDA-approved treatments for nicotine, alcohol, and opioid/heroin use disorders
- There are also medications that have been “off-label” due to known effects on SUDS
- Many clinical trials are examining novel medications, drugs and vaccines for possible MAT use

# Currently Available Medications For Nicotine/Tobacco Use Disorders

- For cessation or relapse
- Nicotine replacement (gum, patches, spray, lozenges)
- Bupropriion (Zyban, Wellbutrin)
- Varenicline (Chantix)

# Currently Available Medications For Alcohol Use Disorders

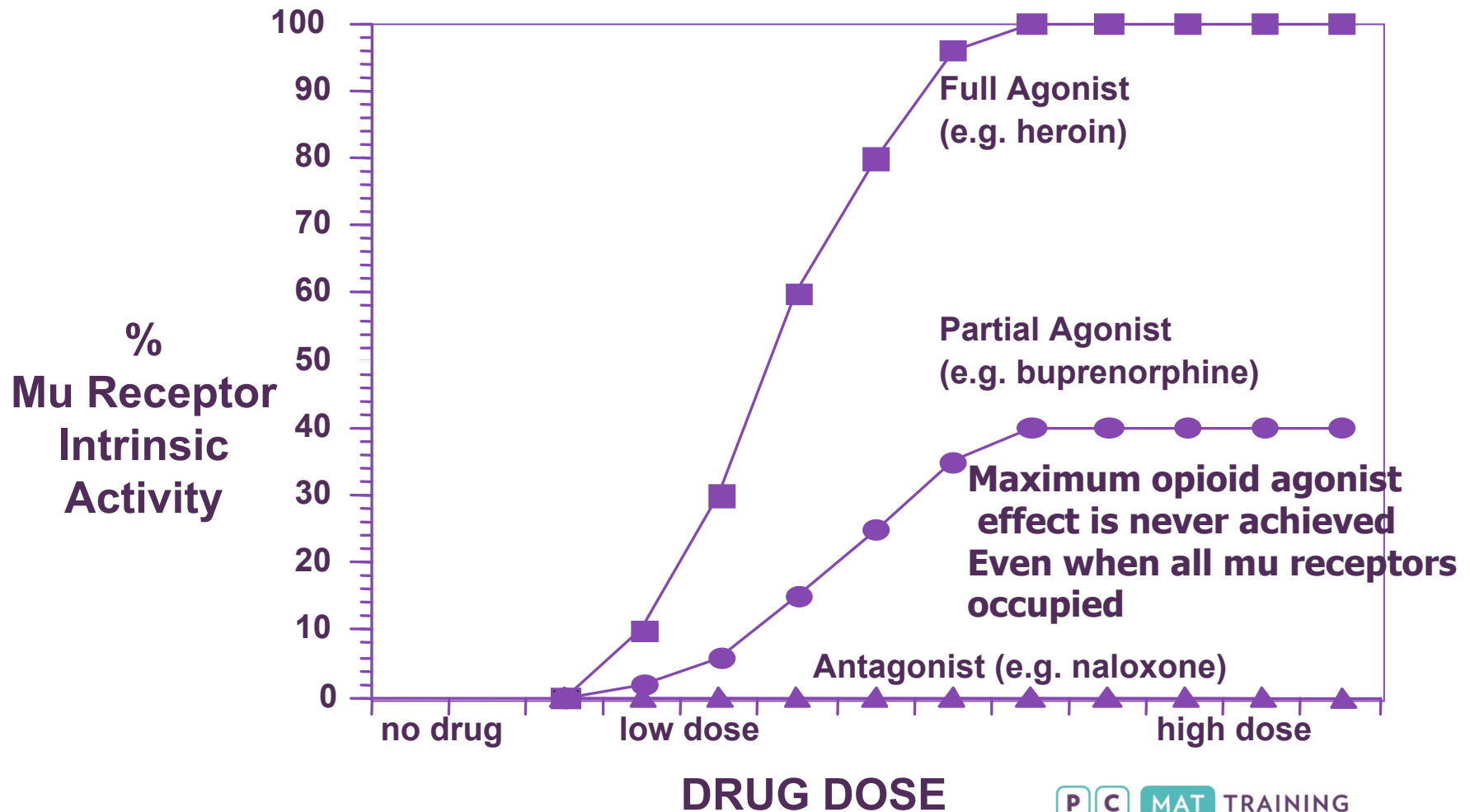
- Acute Withdrawal (Benzodiazepines—longer acting, or off-label anticonvulsants)
- Relapse Prevention
  - Disulfiram (Antabuse)
  - Acamprosate (Campral)
  - Naltrexone (Oral tablets-ReVia; XR Injection-Vivitrol)



# Currently Available Medications For Opioid Use Disorders

- Full agonist (methadone)—from a specialized, certified, and licensed methadone provider
- Partial agonist (buprenorphine)
  - For withdrawal, detox, or maintenance
  - Available in tablets, SL films, buccal films, and now implant
  - Brand names include Suboxone, Zubsolv, Bunavail, Probuphine (implant)
- Antagonist (Naloxone-Narcan; Naltrexone-ReVia, Vivitrol)

# Comparison of Activity Levels



# What is the best recipe for a MAT Clinic

- Utensils and appliances needed
- Key ingredients
- Recipe with exact amounts
- Cooking/culinary skills
- Tasting/eating
- Making changes for the next time



# What is the best recipe for a MAT Clinic?

- Utensils and appliances needed  
*Site Visit, Pharmacy, Lab Issues*
- Key ingredients  
*Staff Hiring, Training*
- Recipe with exact amounts  
*Prescribers + “Glue Person”*
- Cooking/culinary skills  
*Direct care, procedures, logistics*
- Tasting/eating  
*Start seeing and treating patients*
- Making changes for the next time  
*Evaluation, lunch-n-learn, e-consults*

# Recipe Book for MAT Integration

## Key Ingredients

- Opioid Addicted Patients
- Trained Prescribers
- MAT Coordinator

# Recipe Book for MAT Integration

## Key Ingredients

### Opioid Addicted Patients

- Heroin vs. Prescription Opioids<sup>1</sup>
- Motivated vs. Mandated vs. Monitored Patients
- Chronic Pain / Physiologically Dependent Patients
- Co-morbid medical illnesses or psychiatric disorders

# Recipe Book for MAT Integration

## Key Ingredients

### Prescriber of MAT

- Physicians must complete 8 hour “waiver training” and receive special DEA X-number
- As of end of 2016, Nurse Practitioners (APNs) and Physician Assistants (PAs) may complete 24 hours of training<sup>2</sup> and apply for prescriptive authority
- Number of allowed patients varies—from 30 to 100 to 275
- Most often reported barrier to MAT implementation is inexperience/concern for withdrawal in initial patient inductions<sup>3,4</sup>

# Recipe Book for MAT Integration

## Key Ingredients

### MAT Coordinator / “Glue Person”

- Could be CADDC, LCSW, MSW, LPN, RN, Other
- Is primary conduit between patients and prescribers
- Manages referrals, scheduling, medication availability issues, patient tracking
- May conduct on-site MAT groups or connects with community providers/groups
- Is available for patients and trouble shoots often on a daily basis



# Recipe Book for MAT Integration

## Utensils and Appliances

- Clinical Space
- Medication Availability
- Behavioral Treatment

# Recipe Book for MAT Integration

## Utensils and Appliances

### Clinical Space

- No specific requirements
- Helpful to have bathroom nearby for urine toxicology screens and GI issues in opioid withdrawal
- Ideal to have 2 patient rooms so that prescriber (MD, NP, PA) can be monitoring an induction while also seeing other MAT or primary care patients simultaneously
- No emergency equipment needed. COWS only requires phone/watch (for pulse) and pen light (for pupil dilation).
- Need a small conference or group room on weekly basis (if on-site MAT groups are to be facilitated)

# Recipe Book for MAT Integration

## Utensils and Appliances

### Medication Availability

- Bup/Nx tablets are now generic
- Most insurers have Suboxone, Zubsolv, and/or Bunavail are their formularies as well (occasional prior auth)
- Immediate availability of Bup/Nx will dictate the induction model (on-site observed vs. “home” non-observed)
- Partnering with on-site or nearby pharmacy for Bup/Nx
- Naltrexone XR (Vivitrol) is being added to more formularies but prior authorization is often required—very expensive
- If stocking/storing Naltrexone XR, will need refrigerator

# Recipe Book for MAT Integration

## Utensils and Appliances

### Behavioral Treatment

- On-site MAT groups
- 12 Step groups (AA, NA, others)
- SMART Recovery
- Refuge Recovery
- Referral to IOP or other treatment program
- Individual Therapy

# Recipe Book for MAT Integration **Skills Needed, Cooking Times**

- Models of Induction
- Clinical Tools / Toxicology Tests
- Patient Flow/Scheduling
- Clinic Management/Common Problems
  - Diversion, Other SUDs, Pain

# Recipe Book for MAT Integration

## Models of Induction/Care

- *Delivery*—patient already inducted at another site
- *Made from Scratch*—on-site assessment, induction, monitoring
- *Out of a Box*—on-site instructions with “home” non-observed induction

# Recipe Book for MAT Integration

## Models of Induction/Care

### *Delivery*

- Comes to your clinic already on MAT
- From hospital ER<sup>5</sup> or inpatient ward<sup>6</sup>
- From correctional setting<sup>7</sup>
- From **induction center** (hub-and-spoke model)<sup>8</sup>
- From substance abuse tx center
  - Detox, residential, sober living

# Recipe Book for MAT Integration

## Models of Induction/Care

### *Made from Scratch*

- Traditional model taught in waiver training<sup>9</sup>
- Inductions are on-site and observed (COWS Instrument)
- Requires prep time (pre-assessment), space for extended period (on induction day), med availability, and more staff time
- Ensures Bup/Nx taken correctly and able to monitor for precipitated withdrawal
- Proposed to have greater retention<sup>10</sup> and less diversion than the “home induction” model



# Recipe Book for MAT Integration

## Models of Induction/Care

### *Out of the Box*

- Patients are given a prescription and instructions—written, online, video—on when and how to take Bup/Nx
- Patients have to assess timing of their last use and severity of withdrawal before taking medication (SOWS instrument)
- Does not require extended clinic visit or space occupation
- Does not require on-site medication
- A very good option<sup>11</sup> in patients who have been previously prescribed Bup/Nx maintenance, who have been given Bup/Nx for detox purposes, or who have successfully used on the streets/via diversion

# Observed vs. Unobserved

Potential factors to consider	Observed	Unobserved
Effective and tolerability	+++	+(+)
Establish treatment structure	+++	-
Development of therapeutic alliance	++	-/+
Confirm baseline withdrawal (and presence of physiologic dependence)	+++	-/+*
Convenience/preference <ul style="list-style-type: none"> <li>▪ MD</li> <li>▪ Patient</li> </ul>	-/+ -/+	+++ ++
Resources/cost	--	+
Co-morbidity	-/+	-/+

\* Note: pt's can present for evaluation in mild withdrawal but start Bup out of the office

# Recipe Book for MAT Integration **Clinical Tools / Toxicology Testing**

- Screening and assessment tools
- Patient-centered educational materials (including Naloxone training), patient-provider agreement
- Other helpful documents—sample induction notes/progress notes, policy/procedures, FAQs for covering physicians, billing information, protocol/algorithm, implementation checklist
- Prescription monitoring website

# Recipe Book for MAT Integration

## Clinical Tools / Toxicology Testing

### Toxicology Testing

- Urine vs. Saliva—ease of use, \$\$, detection window
- Send-out lab—know what is tested for
- POC testing—likely need assay with high detection of opiates (eg 300 ng/dl)
- POC testing—need separate methadone, buprenorphine, oxycodone, and, maybe, fentanyl

# Recipe Book for MAT Integration

## Patient Flow / Scheduling

- Three phases of treatment—induction, stabilization, and maintenance
- Guidelines are continually changing (TIPS reference)
- After induction, a followup visit or call the next day is recommended
- At our sites, we provide
  - a one-week rx for 4-6 weeks
  - two week rx for the following 6-8 weeks, then
  - monthly thereafter
  - issues with lost rx, diversion, problematic tox results resets the process
- As in cooking, MAT clinic flow and scheduling is often dictated by the shape in which it was prepared. Your management may differ based upon staffing, space, capacity, etc. within your clinic.

# Recipe Book for MAT Integration

## Patient Management / Common Issues

- MAT Coordinator keeps tracking log to know when rx are due, most recent toxicology results, current schedule (weekly, biweekly, monthly), other
- Anticipate / Plan for Common Issues
  - Urine toxicology positive for opiates, methadone, fentanyl
  - Urine toxicology negative for buprenorphine
  - Urine toxicology repeatedly + for THC, BZD, cocaine, PCP, amphetamine
  - Patient seeking BZDs or prescription opiates / tramadol
  - Lost/stolen prescriptions
  - Missed/late appointments—policy around walk-ins
  - Patient seeking BZDs

# Recipe Book for MAT Integration

## Patient Management / Common Issues

- How to manage
  - Opioid Dependence and Co-Morbid Psychiatry Issues
  - Opioid Dependence and Other SUDs (alcohol, cocaine, BZD, other)
  - Chronic Pain
  - Acute Pain (surgeries, trauma, etc)



**Medications as part of MAT services are not the solution,  
but may be a key part to it**

**At best, the MAT component can help persons with SUDs  
reach sobriety/recovery sooner**

**At worst, the MAT component may help prevent a person  
from overdosing and allow them to live one more day**





**The opioid epidemic is enormous in scope**

**There is much funding/grants, trials, programs, task forces, clinical passion, and political fervor about how to address the epidemic**

**Fortunately, a result of the hysteria is a complex but extensive support, education, training, and mentoring network for MAT**

**As we tell our patients, don't be afraid to ask for help!!**

# References

1. Weiss, RD et al. Longterm outcomes from NIDA CTN Prescription Opioid Addiction Treatment Study (POATS). *Drug Alcohol Depend* (2015) 150: 112-119.
2. Waiver training curricula for NPs/PAs through PCSS-MAT—<http://pcssmat.org> or ASAM—<http://elearning.asam.org>.
3. Kissin, W et al. Experiences of a national sample of qualified addiction specialists who have and have not prescribed buprenorphine for opioid dependence. *J Addict Dis* (2006) 25: 91-103.
4. Egan, JE et al. PCSS-B: a novel project to expand/improve buprenorphine treatment. *J Gen Intern Med* (2010) 25: 936-941.
5. D'Onofrio, G et al. Emergency department-initiated buprenorphine/naloxone treatment for opioid dependence: a randomized clinical trial. *JAMA* (2015) 313:1636-1644.
6. Liebschutz, J et al. Buprenorphine treatment for hospitalized, opioid-dependent patients: a randomized clinical trial. *JAMA Intern Med* (2014) 174:1369-1376.

# References

7. Ludwig, AS; Peters, RH. MAT for opioid use disorders in correctional settings: an ethics review. *Int J Drug Policy* (2014) 25:1041-1046.
8. Gunderson, EW et al. Improving temporal efficiency of outpatient buprenorphine induction. *Am J Addictions* (2011) 20: 397-404.
9. Cassadonte, PP; Sullivan, MA. Buprenorphine induction. PCSS guidance from PCSS-MAT. (Updated Nov 27, 2013). <http://pcssmat.org>.
10. Fiellin, DA et al. Counseling plus buprenorphine-naloxone maintenance therapy for opioid dependence. *NEJM* (2006) 355: 365-374.
11. Gunderson, EW et al. Unobserved versus observed office buprenorphine/naloxone induction: a pilot randomized clinical trial. *Addict Behav* (2010) 35: 537-540.