BRANDEIS UNIVERSITY
The Heller School FOR SOCIAL POLICY AND MANAGEMENT
Institute for Behavioral Health
SCHNEIDER INSTITUTES FOR HEALTH POLICY
Knowledge Advancing Social Justice

Medications to Treat Addiction

Sharon Reif, Ph.D.

Improving Quality and Integration of Substance Use Disorder Treatment in the Era of Accountable Care
MBHP/MassHealth Provider Conference -- November 7, 2017

Acknowledgments

- Colleagues
  - Connie Horgan; Deborah Garnick, Andrea Acevedo, Cathy Fullerton; Cindy Parks Thomas; Maureen Stewart, Tim Creedon, Ann-Marie Matteucci, Dominic Hodgkin
- Brandeis-Harvard NIDA Center to Improve System Performance of Substance Use Disorder Treatment

- No conflicts of interest

Today's presentation

- Setting the stage
- Pharmacotherapy
- Barriers
- Effectiveness
- Opportunities for improvement

SETTING THE STAGE

USA TODAY

Trump orders public health emergency for opioids, a partial measure to fight drug epidemic

FACING ADDICTION IN AMERICA

The Surgeon General's Report on Alcohol, Drugs, and Health

Why have substance misuse and substance use disorders become a public health crisis in the United States?

1 in 7 people will develop a substance use disorder at some point in their lives.

Source: Kessler et al., 2005.

Substance misuse has serious consequences including:

- Heart and liver diseases
- Various forms of cancer
- HIV/AIDS
- Problems related to drinking or using drugs during pregnancy

Vox

It's not just opioid addiction. Alcoholism may be on the rise too.

Especially among women, the poor, and minorities.

HEALTH

The New York Times

Alcohol Abuse Is Rising Among Older Adults

OVER 80% OF PATIENTS WHO HAD AN OPIOID USE DISORDER DID NOT GET TREATMENT IN A SPECIALTY CARE FACILITY IN 2015.

Though effective, treatment medications are extremely underutilized.

NIDAMED

(twitter 10/30/2017)

FACING ADDICTION IN AMERICA

The Surgeon General's Report on Alcohol, Drugs, and Health

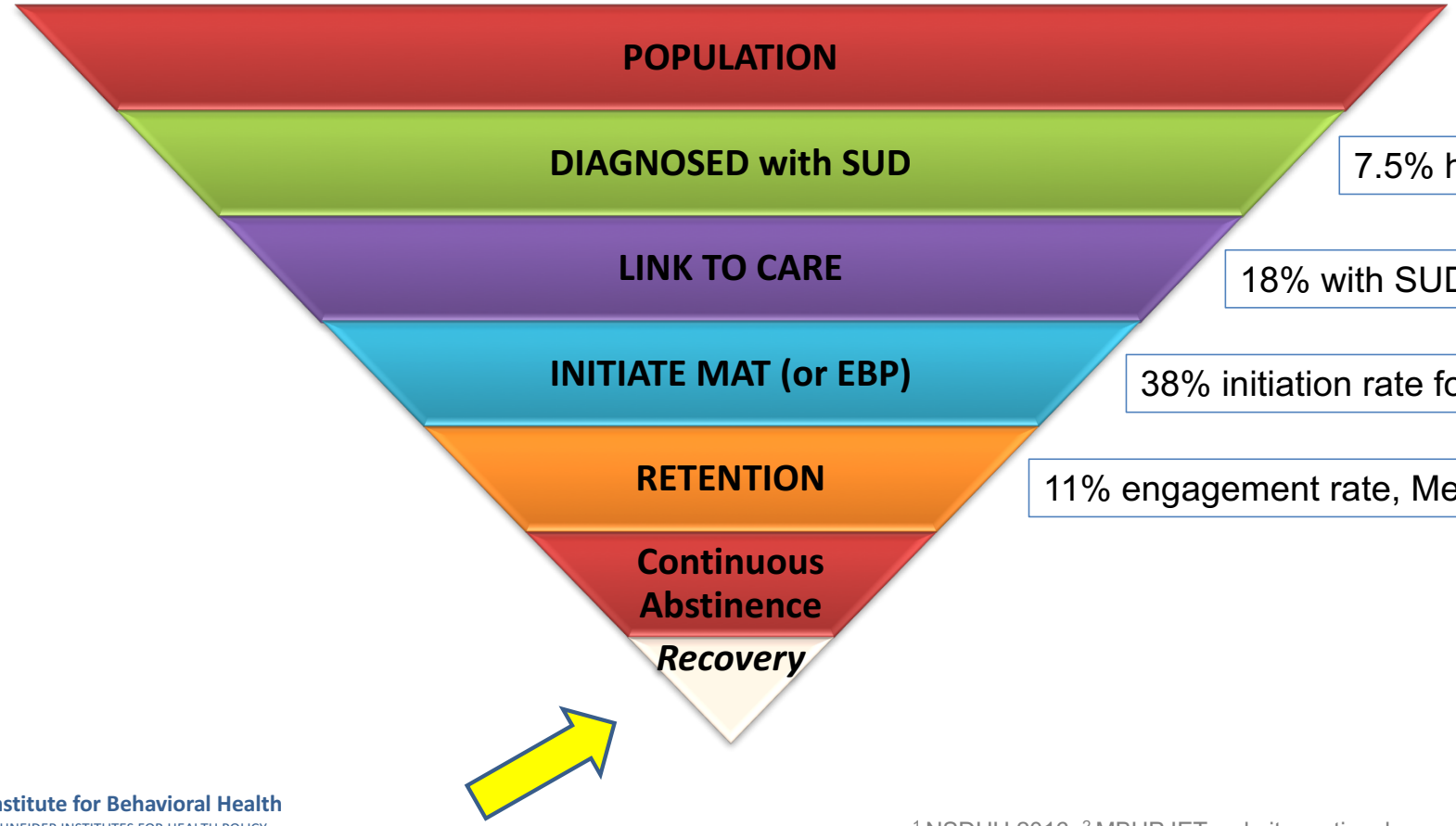
Identify

Abstinence

Treat

Recovery

Cascade of care



7.5% have SUD[1]

18% with SUD access <u>any</u> treatment[1]

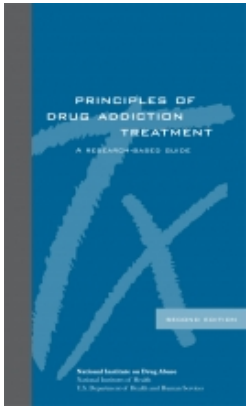
38% initiation rate for all SUD, Medicaid[2]

11% engagement rate, Medicaid[2]

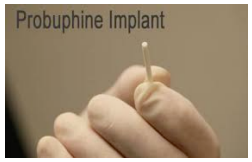
[1] NSDUH 2016; [2] MBHP IET website, national averages

Principles of effective treatment

National Institute on Drug Abuse
The Science of Drug Abuse & Addiction



1. Addiction is a complex but treatable disease that affects brain function and behavior
2. No single treatment is appropriate for everyone
3. Treatment needs to be readily available
4. Effective treatment attends to multiple needs, not just SUD
5. Remaining in treatment for adequate time is critical
6. Behavioral therapies are most commonly used
7. **Medications are an important element, especially combined with behavioral therapies**



PHARMACOTHERAPY (MEDICATION-ASSISTED TREATMENT)

Pharmacotherapy/MAT

- Medications to:
  - stop or reduce substance use
  - reduce craving
- FDA-approved medications available for alcohol, opioids
  - naloxone ≠ treatment
- Psychosocial treatment recommended in conjunction
  - yet findings are mixed, especially for opioid use disorders
- Response might vary across patient sub-groups

- Endorsed by NQF, NIDA, ASAM, meta-analyses, many research studies
- Treatment guidelines exist (see resources at end)

NIH National Institute on Alcohol Abuse and Alcoholism

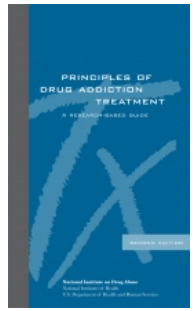
Medications Development: **Treatment for alcohol use disorder includes behavioral treatments…as well as pharmaceutical treatments**

NATIONAL QUALITY FORUM

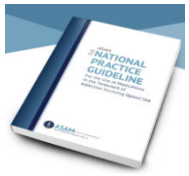
1st Consensus Standard for SUD Treatment: **Pharmacotherapy (for withdrawal and for dependence)**

NIH National Institute on Drug Abuse
The Science of Drug Abuse & Addiction

NIDA Principles of Effective Treatment: **Medications are an important element, especially combined with behavioral therapies**



ASAM American Society of Addiction Medicine



ASAM Public Policy Statement, OUD National Practice Guidelines: **Pharmacological therapy can be a part of effective professional treatment for OUD…best accompanied by and provided in conjunction with evidence-based psychosocial treatments and recovery support interventions**

Changing environment

- Pharmacotherapy for addiction has evolved significantly
  - types of medications, modes of administration
- Improved acceptability and access
  - specialty settings that traditionally used an abstinence-based approach are increasingly using medications to treat addictions
  - buprenorphine and other medications available within office-based settings
  - less reliance on opioid treatment programs (OTPs)
  - medications beyond methadone available in OTPs
  - role for primary care, psychiatry, community health centers, etc.

UNDER-UTILIZED

Few who would benefit receive prescriptions

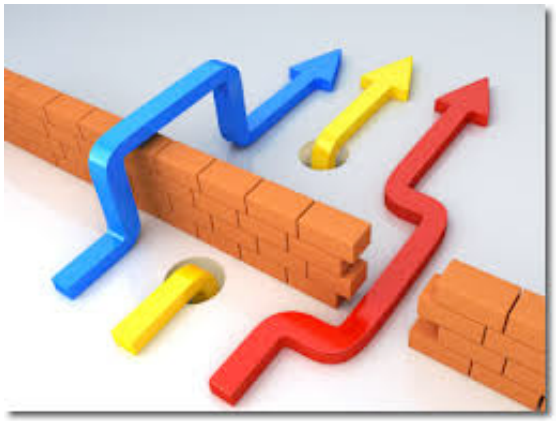
- Small proportion are prescribed addiction meds
  - e.g. <2.5% of alcohol-dependent patients in the VA received a prescription for oral naltrexone or other medication for alcohol dependence
- <33% of clinically appropriate patients received prescriptions in specialty treatment programs that prescribe any addiction meds
- Prescribing for addiction is much less common than for mental disorders
  - e.g. 70% of those with psychiatric diagnoses received psychiatric prescriptions in the same specialty programs

as cited in Reif et al. 2017, JSAT

Limited prescribing by those who could do so

- <50% of specialty treatment programs prescribed any addiction meds[1]
  - Buprenorphine prescribed in 58% OTPs and 21% non-OTPs[2]
  - Injectable naltrexone prescribed in 23% OTPs and 16% non-OTPs[2]
- Most buprenorphine prescribers practice well under their current patient limit and have numerous months with no patient episodes[3]
  - Buprenorphine prescribers treated 13 patients per month, on average, with a median of only 4 patients per month
  - Even prescribers with the 100+ patient waiver treated only about 33 patients per month, on average, median of 23

[1] as cited in Reif et al. 2017, JSAT; [2] SAMHSA CBHSQ Report 2017; [3] Thomas et al. 2017, DAD – 3 state study



BARRIERS…

Barriers to adopting any new practice

- Complex clients
- Training
- Implementation
- Fidelity
- Clinical inertia
- Lack of medical staff
- Research to practice delay
- Practice to research gap
- Reimbursement

Patient barriers

- Ambivalence about getting treatment
- Knowledge
  - effectiveness, where to get help
- Stigma
  - patient, family, providers
  - OTP daily clinic attendance and requirements reinforce “person with SUD”
- Cost
  - prescribers who don’t accept Medicaid or other insurance
- Availability
  - waivered prescribers, prescribers accepting new patients, geographic access

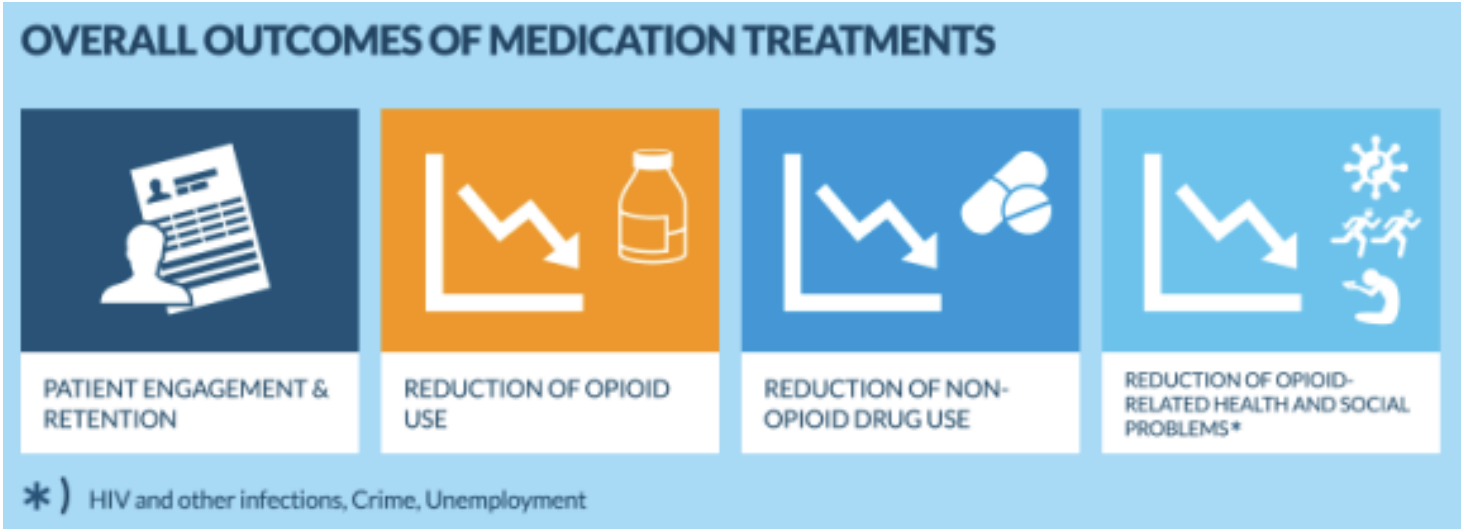
Reif et al. 2017, J Psychoactive Drugs; Reif et al. 2017, JSAT

Prescriber barriers

- Knowledge and training, confidence
  - effectiveness, appropriateness, induction, psychosocial supports
- Structural
  - buprenorphine waiver and prescribing limits, lack of medical staff, injection or implant requirements and capability, storage of medications, drug screens, prescribing and psychosocial support partners
- Practice constraints
  - time, multiple priorities during office visit, reimbursement issues
  - anti-medication bias (philosophical/cultural)
  - worry that will become inundated with medication requests
- Diversion concerns
- Stigma
  - among providers, may also limit knowledge, screening, referral to treatment
- Not interested
  - addiction overall, treating addiction patients, increasing addiction patient load

Reif et al. 2017, J Psychoactive Drugs; Reif et al. 2017, JSAT

EFFECTIVENESS


OVERALL OUTCOMES OF MEDICATION TREATMENTS
PATIENT ENGAGEMENT & RETENTION
REDUCTION OF OPIOID USE
REDUCTION OF NON-OPIOID DRUG USE
REDUCTION OF OPIOID-RELATED HEALTH AND SOCIAL PROBLEMS*
*) HIV and other infections, Crime, Unemployment

Alcohol Use Disorders

- Disulfiram [Antabuse]
- Naltrexone – oral[1] [Revia]
  - greatly reduced risk of heavy drinking compared to placebo
  - slight decrease in drinking days, heavy drinking days, amount of alcohol consumed
  - reduces craving, better than acamprosate
  - effect on abstinence best if abstinent before starting naltrexone
- Naltrexone – extended release injectable[2] [Vivitrol]
  - comparable to oral naltrexone but not better
  - improved adherence (long-acting injection)
- Acamprosate[3] [Campral]
  - greatly reduced risk of any drinking compared to placebo
  - effect on abstinence is best if detoxed before starting acamprosate
  - no effect on heavy drinking

[1] Rosner et al. 2010a; Maisel et al. 2012; [2] Maisel et al. 2012; Gastfriend 2011; [3] Rosner et al. 2010b

Opioid Use Disorders

- Methadone[1]
  - reduces illicit opioid use
  - improves treatment retention
  - some positive effects on mortality, other drug use, HIV risk behaviors, criminal activity
  - response related to dosage (60mg at minimum)
- Buprenorphine with naloxone[2] [Suboxone]
  - effects comparable to methadone, with fewer side effects
- Naltrexone – extended release injectable[3] [Vivitrol]
  - compared to placebo, higher rates of abstinence, opioid free-days, treatment retention, and less craving
  - as effective as buprenorphine for short-term abstinence (long-term data not available)

[1] Fullerton et al. 2014; [2] Thomas et al. 2014; [3] Krupitsky et al. 2011; Gastfriend 2011; Tanum et al. 2017

- Some have implied that methadone is no longer necessary, but it is clearly still the best treatment for some, especially those with more severe OUDs or who are unsuccessful in office-based settings

Reif et al. 2017, J Psychoactive Drugs; ASAM 2015; Knopf 2016; Mattick et al. 2014

Psychiatric Services

Reducing Behavioral Health Inpatient Readmissions for People With Substance Use Disorders: Do Follow-Up Services Matter?

Sharon Reif, Ph.D., Andrea Acevedo, Ph.D., Deborah W. Garnick, Sc.D., Catherine A. Fullerton, M.D., M.P.H.

Psychiatric Services 68:8, August 2017

READMISSIONS EXAMPLE

Background

- People with SUDs have
  - greater complexity of care
  - more hospital-related complications
  - longer lengths of stay
  - higher costs
  - high rates of readmissions
- Prompt receipt of follow-up SUD services could reduce readmission
  - Outpatient services in community mental health centers (CMHC) reduce readmission for MH/SUD patients
  - Follow-up services post-detox reduce detox readmission

Reif et al. 2017, Psychiatric Services

Research question

- Do targeted follow-up services received shortly after discharge from inpatient hospital or residential detoxification reduce likelihood of post-discharge behavioral health admissions among Medicaid beneficiaries with an SUD diagnosis

- Follow-up behavioral health services include
  - Medication-assisted treatment (MAT)
    - defined as a prescription fill of buprenorphine, disulfiram, acamprosate, or naltrexone or a HCPCS service code for methadone, buprenorphine, or naltrexone
  - Outpatient (OP)
  - Intensive outpatient or partial hospitalization (IOP)
  - Residential (RES)

Methods

Sample:

- Medicaid enrollees (FFS only), with an index inpatient admission with SUD diagnosis (whether or not primary)
- adults 18-64
- excludes dual Medicare/Medicaid
- 2008 claims in 10 states – all offered OP and MAT, 5 offered IOP, 3 offered RES

Outcome

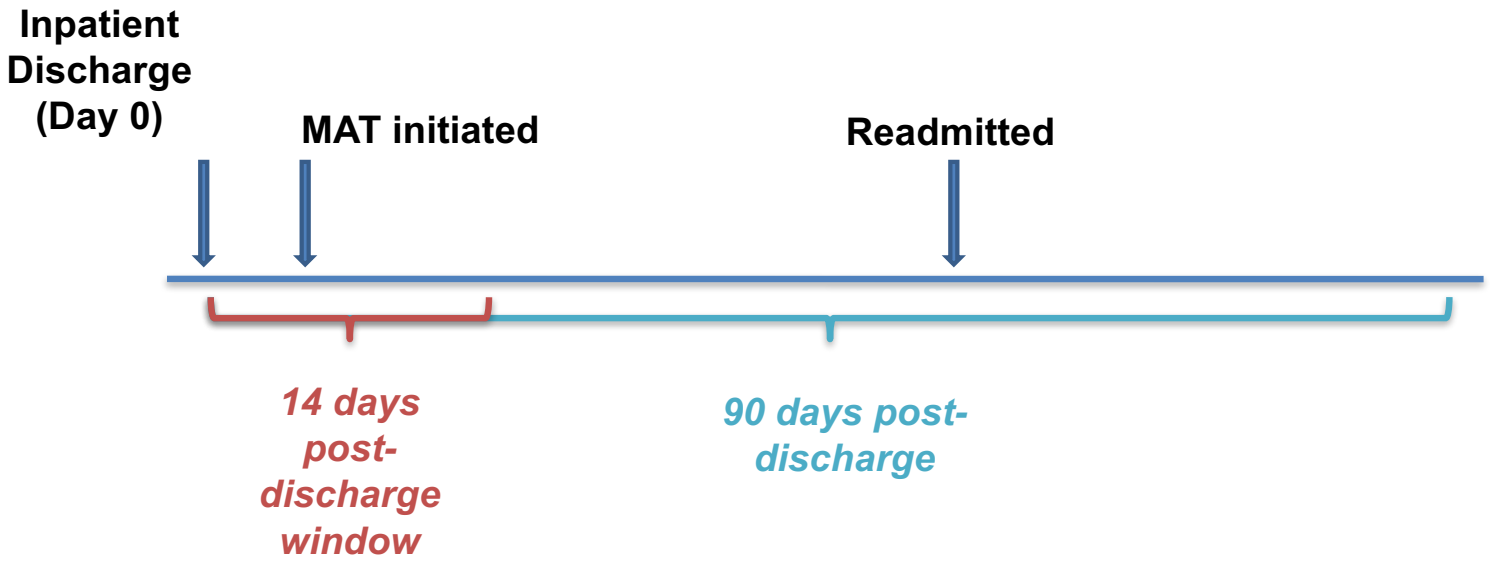
- time to a BH admission in the 90 days following discharge from index admission
  - inpatient admission with an SUD/MH primary diagnosis OR
  - residential detoxification admission

Follow-up Services: MAT, OP, IOP, RES

- receipt of each service during 14-days post-discharge
- # days to the first of any of the follow-up services received within 14-days post-discharge

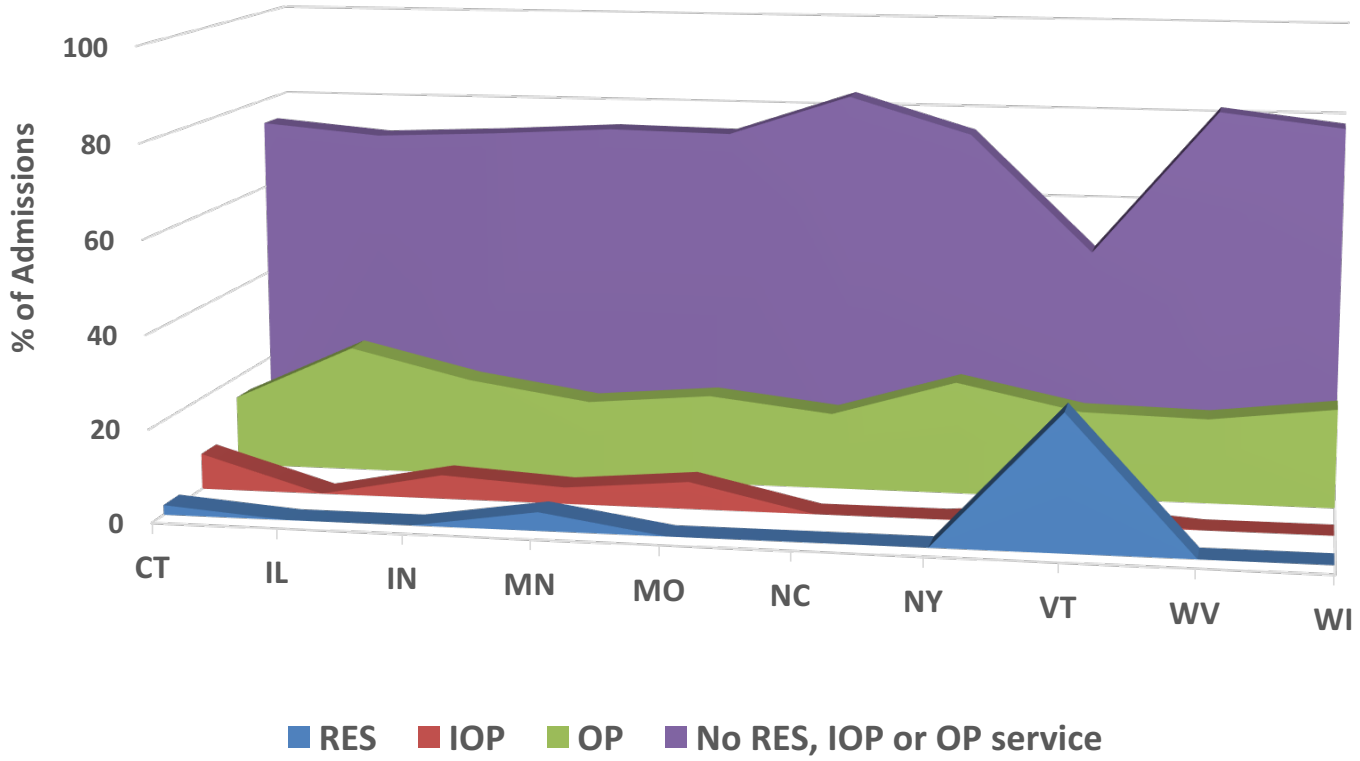
Covariates: sociodemographics, SUD type, comorbid diagnoses, prior BH treatment, index LOS

Example



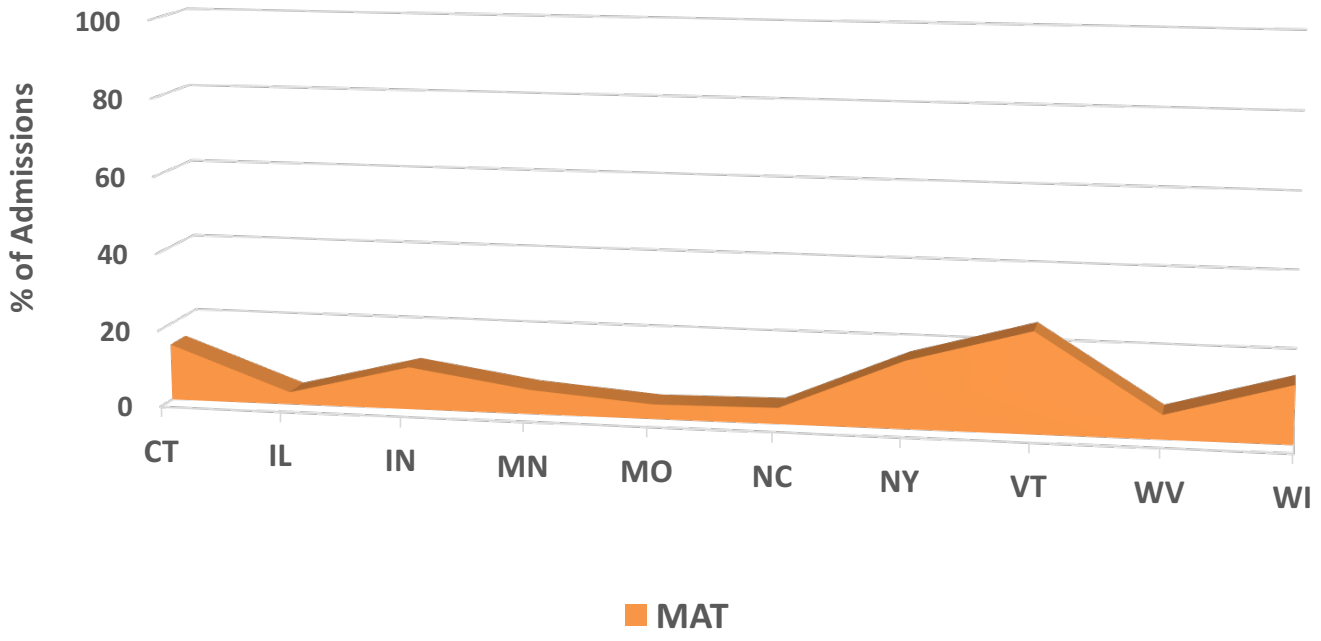
Reif et al. 2017, Psychiatric Services

Key Independent Variable:
Follow-Up BH Services in 14 Days Post-Discharge



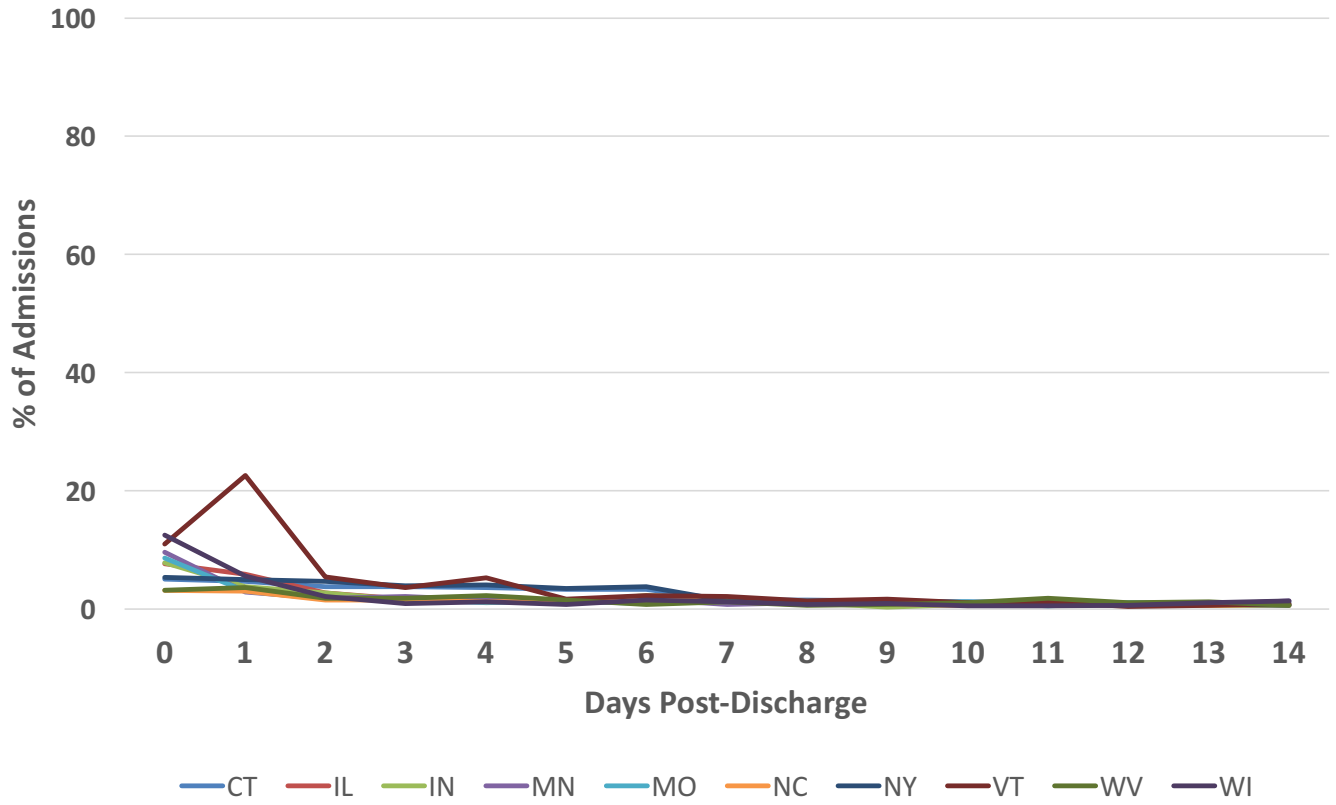
Reif et al. 2017, Psychiatric Services

Key Independent Variable:
Follow-Up MAT in 14 Days Post-Discharge



Reif et al. 2017, Psychiatric Services

Key Independent Variable:
Days to First BH Follow-Up Service (OP, IOP, RES, MAT)



Reif et al. 2017, Psychiatric Services

Results:
Likelihood of BH inpatient admission 90d post-dcg

- MAT associated with ~40% reduced likelihood of BH inpatient admission 90 days post-discharge
  - when controlling for other follow-up services received (OP, IOP, RES)
  - RES also associated with ~50% reduced likelihood, but only tested in 3 states
  - Controlling for state, reason for Medicaid eligibility and other covariates
- Results consistent with other studies

OPPORTUNITIES FOR IMPROVEMENT

Increasing prescribers

- Training in addiction medicine broadly and pharmacotherapy
  - confidence assessing and acknowledging addiction, providing care to patients with SUD
  - Increased willingness to prescribe and develop support systems for when they do so
  - role for professional organizations, health plans, federal and state agencies
- Disseminate guidelines for use of addiction pharmacotherapy
- Increase number of prescribers
  - primary care providers, psychiatrists, addiction medicine, others
  - nurses, physician assistants
  - specialty treatment programs with traditional abstinence-based approach – role for health plans, SAMHSA, others to encourage and support transition
- Assist in identifying psychosocial services and recovery supports
  - Develop community partners and information networks
- Work with experts/champions to support less-experienced prescribers

Encouraging use of pharmacotherapy

- Performance measures, incentive structures, recognition programs
  - emphasize pharmacotherapy as an evidence-based practice and reward quality
- Pharmaceutical company role, similar to other areas of medicine
  - educating or training providers, offering assistance with medication requirements, subsidizing copays for medications
- Partnerships with primary care settings
  - access to medical care for addiction treatment programs without in-house medical resources
  - “hub and spoke” as one model
- Other conditions might offer models for change
  - depression and HIV, as medical conditions whose treatment was once highly stigmatized and relegated only to specialty providers

as cited in Reif et al. 2017, JSAT

SUMMARY

- Medications to treat addiction are effective and cost-effective
- Utilization by patients, prescribers, and addiction treatment programs is increasing, but there is still a long way to go
- Barriers are wide-ranging
- Many opportunities to surmount barriers and increase medication use
- Be a champion for medication as EBP
- Recovery remains the goal

Thank you!

QUESTIONS?

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Resources

- ASAM National Practice Guideline for the Use of Medications in the Treatment of Addiction Involving Opioid Use
  - https://asam.org/resources/guidelines-and-consensus-documents/npg
- SAMHSA TIP 43 - Medication-Assisted Treatment For Opioid Addiction in Opioid Treatment Programs
  - https://store.samhsa.gov/shin/content//SMA12-4214/SMA12-4214.pdf
- SAMHSA TIP 49 - Incorporating Alcohol Pharmacotherapies Into Medical Practice
  - https://store.samhsa.gov/shin/content//SMA13-4380/SMA13-4380.pdf
- SAMHSA – Pocket Guide: Medication-Assisted Treatment of Opioid Use Disorder
  - https://store.samhsa.gov/shin/content/SMA16-4892PG/SMA16-4892PG.pdf
- NIAAA Helping Patients Who Drink Too Much: A Clinician's Guide
  - https://www.niaaa.nih.gov/guide
- SAMHSA – Medication for the Treatment of Alcohol Use Disorder: A Brief Guide
  - https://store.samhsa.gov/shin/content//SMA15-4907/SMA15-4907.pdf