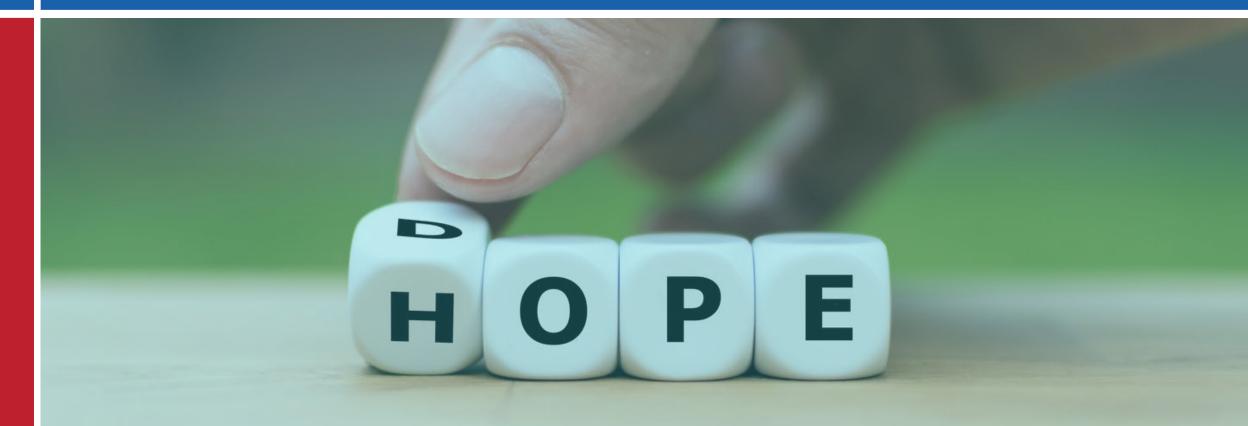
### Meth as a Driver of the HIV Epidemic What can End the HIV Epidemic (EHE) jurisdictions do to address the disruptive role of Methamphetamine use in HIV prevention and care



Thursday, September 30th, 2021

12 – 1pm ET; 11am – 12pm CT; 10 – 11am MT; 9 – 10am PT



#### To Access Webinar: https://targethiv.org/ta-org/tap-in



### Helping to End the HIV Epidemic by Addressing Substance Use Disorders (SUDs) in People with HIV

Insights from the Field and How to Access TA and Training Funded by the Ending the HIV Epidemic Initiative

Thursday, February 25, 2021

1:00-2:30 pm ET – 12:00-1:30 pm CT – 11:00 am -12:30 pm MT – 10:00-11:30 am PT



This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of the Year 2 award totaling \$6,000,000 with 0% financed with non-governmental sources. The contents are those of the authors and do not necessarily represent the official views of, nor an endorsement by, HRSA, HHS or the U.S. Government.





Strengthen and support implementation of jurisdictions' Ending the HIV Epidemic (EHE) Plans to contribute to achievement of a reduction in new reported HIV cases by 75% by 2025



Tip: Get TAP-in TA and Training by Contacting TAP-in@caiglobal.org





### **TAP-in Webinar Partners**

## UCLA Health UCSanDiegoHealth





Addiction Technology Transfer Center Network Funded by Substance Abuse and Mental Health Services Administration





The organizations shown here are partners with TAP-in for this webinar





### POLL #1

Addressing Methamphetamine use in our community is crucial to help end the HIV epidemic.

(1) Strongly disagree
(2) Disagree
(3) Neither agree nor disagree
(4) Agree
(5) Strongly agree









#### WHICH BEST DESCRIBES YOUR <u>NUMBER ONE</u> HIV RELATED WORK ROLE?

(CHOOSE ONE ONLY)

- 1. Health Department
- 2. Ryan White Planning
- 3. Council Member
- 4. Clinician
- 5. Case Manager

- 6. Linkage/Navigator
- 7. Social Worker
- 8. Administrator
- 9. Federal Government Staff

10. Other (write into chat)





### Panel



**Tom Donohoe** 

Professor of Family Medicine, David Geffen School of Medicine at UCLA, TA Provider, TAP-in and PAETC-Los Angeles Area



Beth Rutkowski, MPH

Co-Director, SAMHSAsupported Pacific Southwest Addiction Technology Transfer Center



Jessica L Montoya, PhD

Assistant Professor of Psychiatry, UC San Diego, Psychologist at UC San Diego Owen Clinic, Leadership Trainee of the San Diego CFAR Ending the HIV Epidemic Scientific Working Group



Max Sepulveda, MPA

Managing Director of Harm Reduction Services, Housing Works



William Murphy

Project Director, TAP-in, CAI





### At the conclusion of this activity, participants will be able to:



Review the negative impact of methamphetamine (Meth) use on both HIV prevention and treatment programs



Discuss the epidemiology and biology of methamphetamine use in the context of Ending the HIV Epidemic (EHE) efforts



Review evidence-based interventions for Meth users, with a focus on harm reduction and contingency management



Access technical assistance (TA) for EHE jurisdictions implementing or considering local interventions for people who use Meth

### **Webinar Outline**



**Case Study Review** 



**Role of Methamphetamines in the Fight Against HIV** 



**Evidence Based Interventions** 



UC San Diego Health Experience



Role of Hook-up Apps and Methamphetamine Use













### **Case: EHE Jurisdiction A and Meth**

**EHE Jurisdiction A** and their HIV planning body have been reviewing how Methamphetamine (Meth) is impacting their HIV epidemic. They recently had presentations from a Meth Task Force, a researcher, community providers, and a panel of people with HIV impacted by Meth.

They heard that Meth use is:

- Increasing in their community and is often the number one substance related to new syphilis and HIV cases.
- A major factor for people falling out of HIV care, and not being able to maintain an undetectable viral load when in care.
- Increasing among MSMs of color and homeless women.
- Impacting medication-assisted treatment (MAT) programs for opioids, as many people with HIV in those programs also use Meth.





I feel our jurisdiction is facing similar challenges to EHE Jurisdiction A's.

a) Yes, 100%
b) Yes, a lot 50-99%
c) Yes, somewhat 25-49%
d) Yes, a little <24%</li>
e) No
f) Unsure





## POLL #3

The intervention that has <u>the most</u> robust evidence for effectively treating stimulant use disorder is:

- a) An FDA-approved medication
- b) Contingency Management (CM)
- c) Cognitive Behavioral Therapy (CBT)
- d) Community Reinforcement Approach
- e) Exercise



### Beth Rutkowski, MPH

Co-Director, SAMHSAsupported Pacific Southwest Addiction Technology Transfer Center

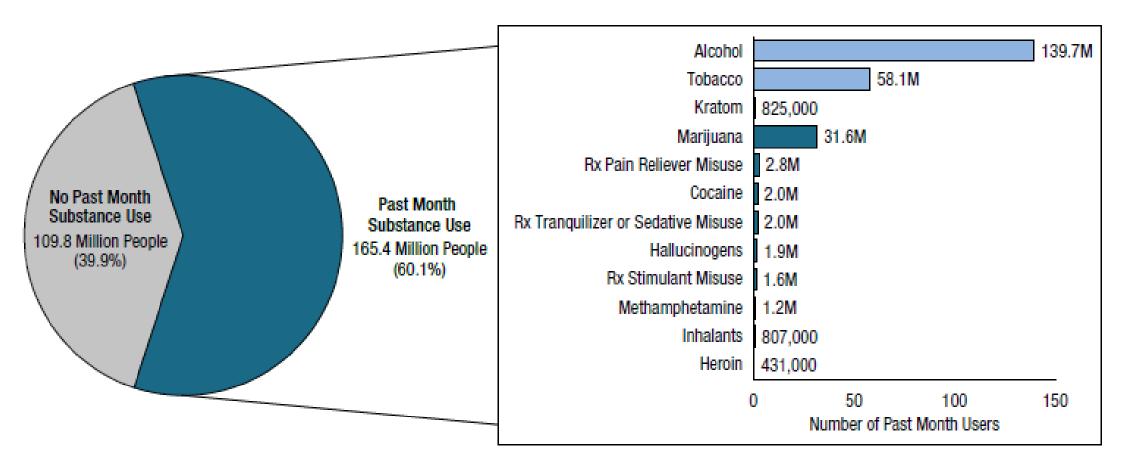


### Increases In Treatment Admissions Seen For Select Psychoactive Substances, 2008-2018

2,200,000 2,000,000 130,184 132,697 1,800,000 127,612 Not Reported 202,410 1,600,000 283,728 147,367 Other Drugs 1,400,000 357,539 Meth/Amphet/Other Stim 1,200,000 502,845 Other Opioids/Synthetics 1,000,000 Heroin 800,000 227,647 600,000 Marijuana/Hashish 400,000 Alcohol 200,000 Cocaine 239.019 107,872 0 2008 2018



### Numbers Of People Reporting Past Month Substance Use Among Those Aged 12 Or Older: 2019

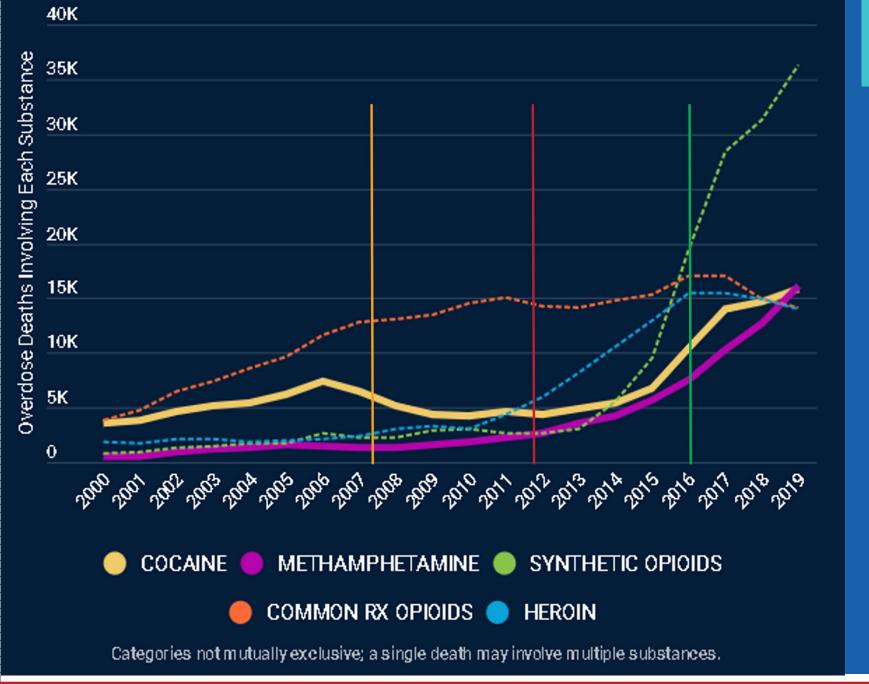


Rx = prescription.

Note: Substance Use includes any illicit drug, kratom, alcohol, and tobacco use.

Note: The estimated numbers of current users of different substances are not mutually exclusive because people could have used more than one type of substance in the past month.

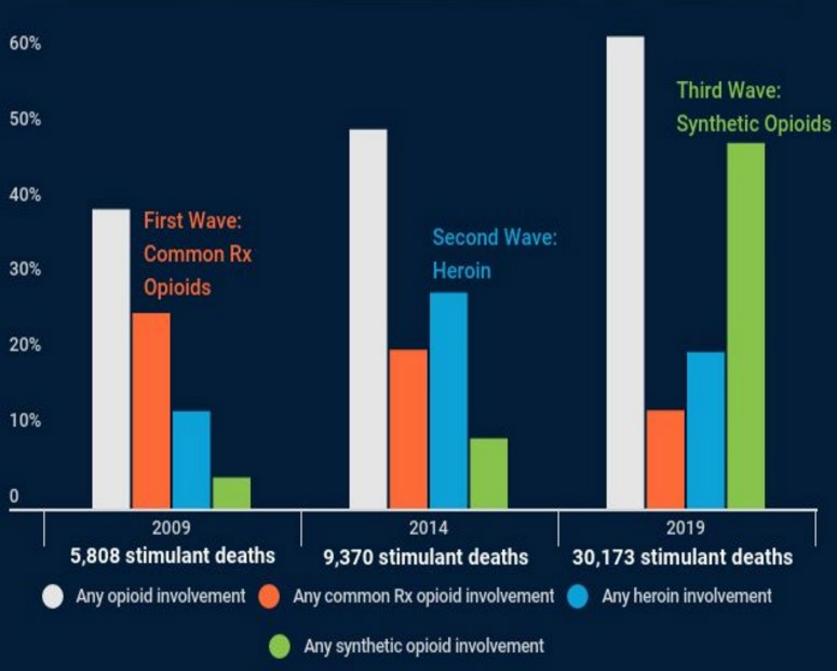




Stimulant Deaths Now Eclipse Deaths Involving Heroin or Rx Opioids



NIHCMF, 2021

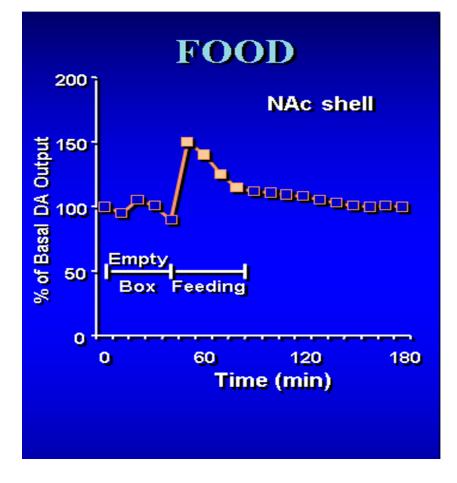


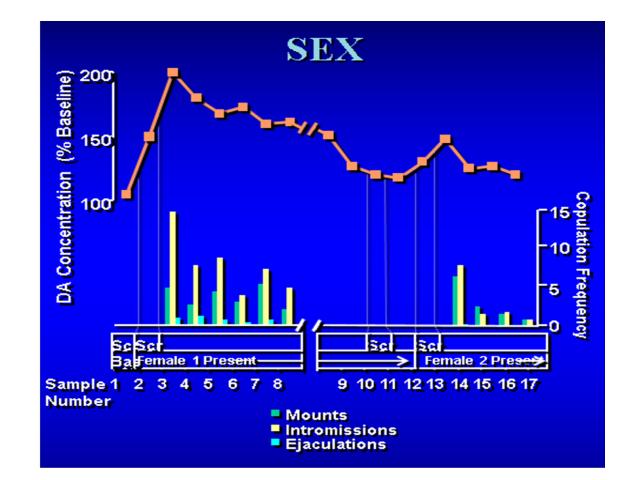
A Growing Percentage Of Stimulant-related Deaths That Also Involve Opioids



**NIHCMF**, 2021

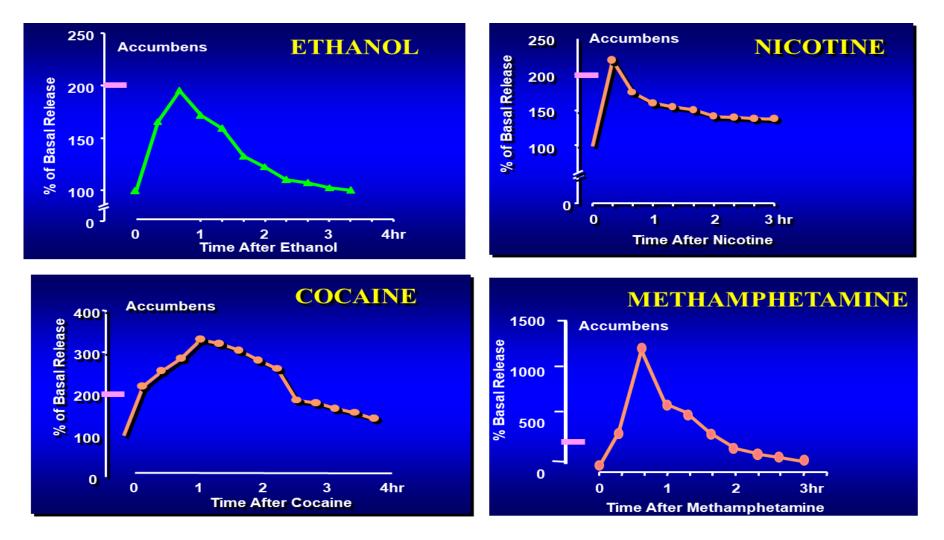
### **Natural Rewards Elevate Dopamine Levels**





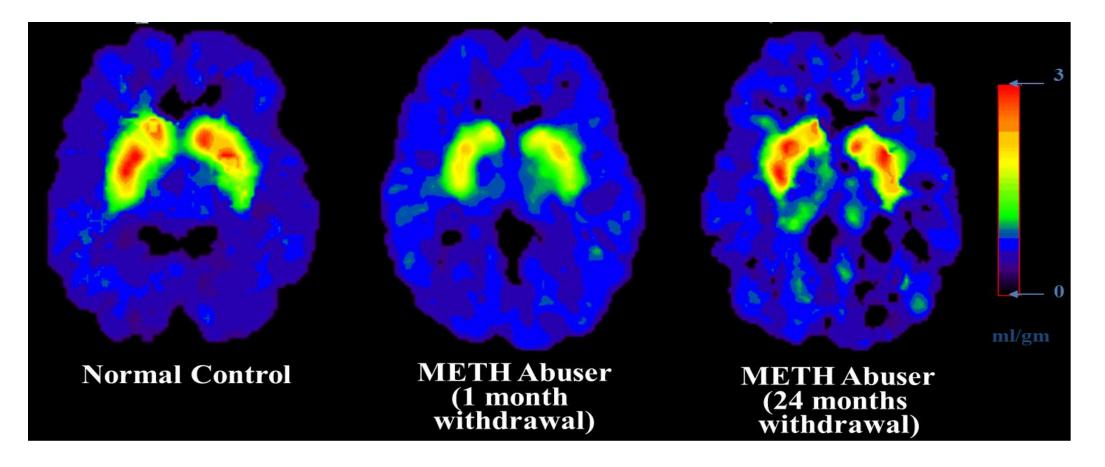


### **Effects Of Drugs on Dopamine Release**



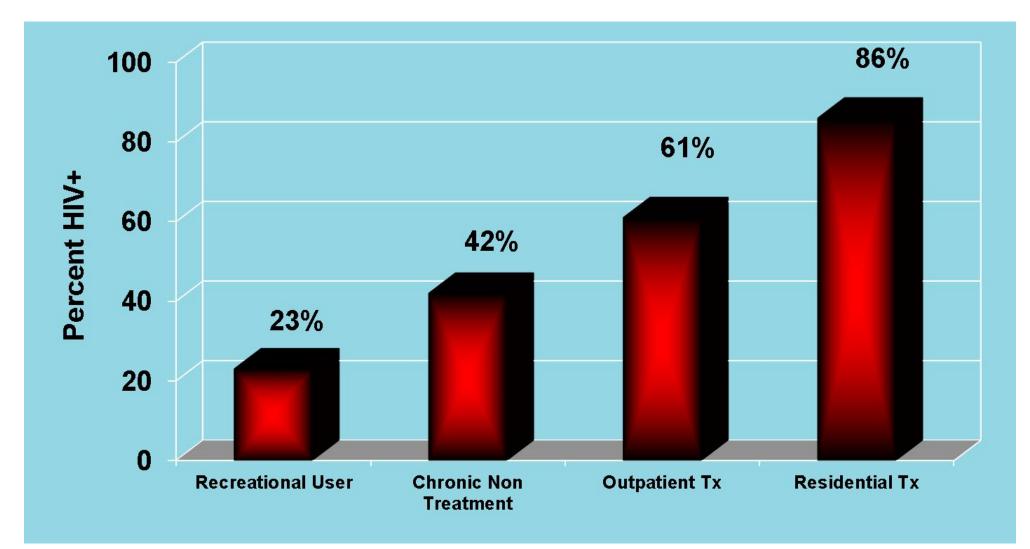


### Partial Recovery of Brain Dopamine Transporters Following Protracted Abstinence





## Methamphetamine And HIV in MSM: A Time-to-Response Association?





### Methamphetamine and Its Impact on HIV Transmission and Progression

Methamphetamine use:

- Lowers sexual inhibitions, impairs judgment, and provides energy and confidence to engage in sexual activity for long periods of time
- Causes erectile dysfunction
- Causes mucosal dryness
- Decreases adherence to HIV treatment and medical follow-up
- Increases HIV replication
- Accelerates progress of HIV-related dementia



## The Effect of Methamphetamine On The Brain of A Person With HIV

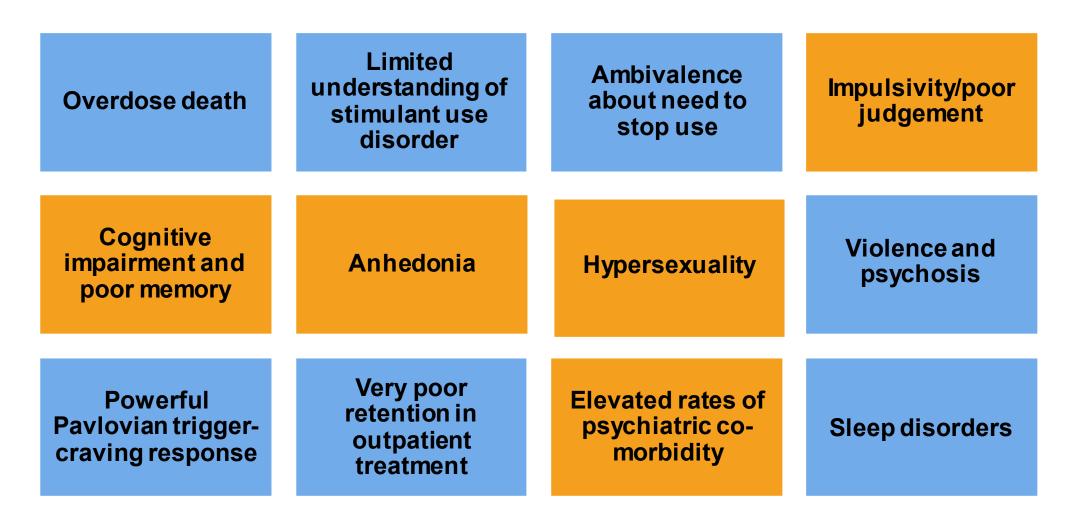
HIV and meth are thought to have synergistic cognitive and neurological impacts.

In the presence of HIV, methamphetamine can cause:

- Even greater dopamine release and cellular damage
- Additive damage to the frontal cortex and basal ganglia
- Difficulty in adhering to antiretroviral regimen
- Deficits in attention/working memory, abstract decision-making, and psychomotor speed



## Clinical Challenges Of Working With People With A Stimulant Use Disorder





# Are There Medications For The Treatment Of Stimulant Use Disorder?

The short answer is NO

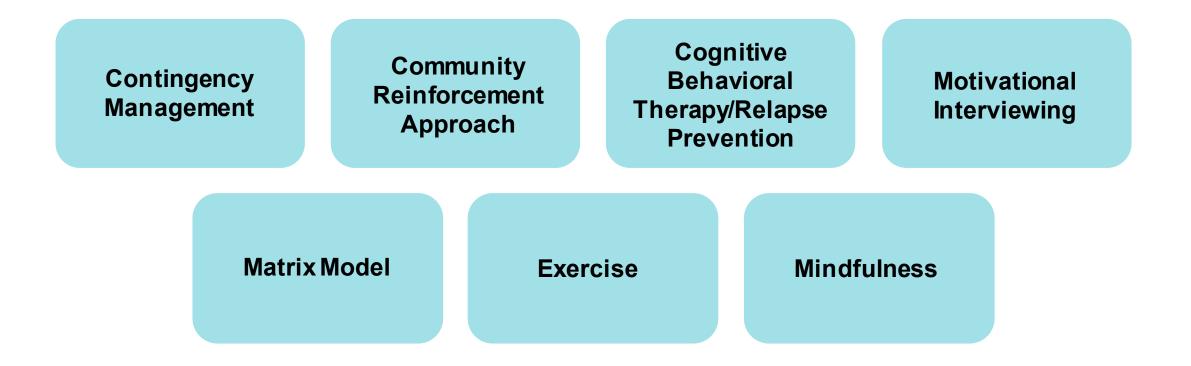
A few medicines have had positive results in clinical trials

To date, these medicines have not demonstrated reproducible results

Much more research is needed to determine the overall efficacy of these medicines



# Behavioral Treatments for Individuals with a Stimulant Use Disorder





### **Contingency Management**

- Based on pioneering work of Steven Higgins & colleagues at the University of Vermont
- Very powerful approach for achieving initial abstinence from numerous drugs of abuse
- Patients adhering to targeted behavior (i.e. drug abstinence, attendance, attending job training, etc) are positively reinforced



### **Contingency Management In Practice: Challenges**

#### CM must be simple

- Easy to track target behaviors
- Little burden on the counselor or administrative staff (can't reward patients and punish staff)

#### **CM** must address staff resistance

- Patients should not have to be "paid" or "bribed"; recovery is the reward
- Motivation needs to come from within

Reframe CM as an engagement and retention technique along with traditional interventions and approaches



### More (Recent) Evidence for Contingency Management as a Response to Stimulant Use

A 2020 systemic review of 27 studies found that contingency management has broad benefits in:

- Greater drug adherence
- Higher utilization of other treatments and medical services
- Reductions in risky sexual behavior

**Recommendation:** Outpatient programs that offer treatment to people with a methamphetamine use disorder should *prioritize adoption and implementation of contingency management* 



### Jessica L Montoya, PhD

Assistant Professor of Psychiatry, UC San Diego, San Diego Center for AIDS Research (CFAR), Psychologist at Owen Clinic

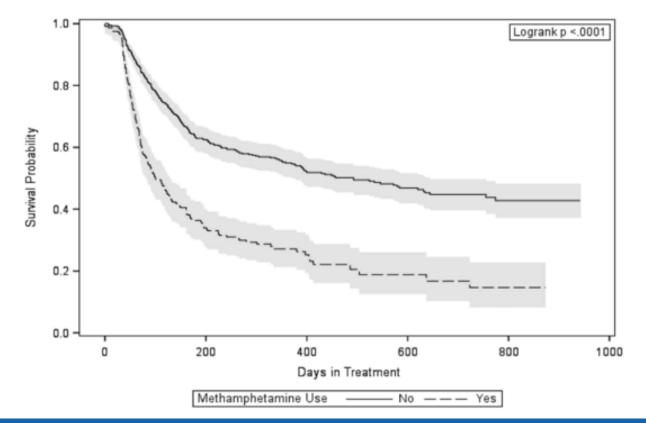
# Methamphetamine disrupts retention on medication-assisted treatment (MAT)

Integrating substance use disorder services in HIV care settings promotes retention in HIV care

People with HIV who receive MAT for opioid use disorder have increased likelihood of viral suppression

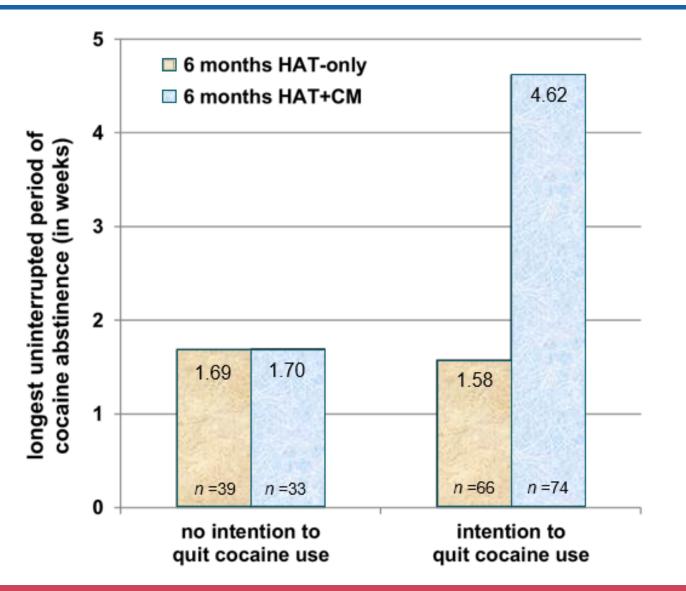
Methamphetamine use disrupts MAT retention

Kaplan-Meier survival curves for time to discharge for methamphetamine users and non-users





### **MAT and Contingency Management**





### Implementation Involves Adaptation

## Adaptation = modification to the intervention and/or implementation protocol

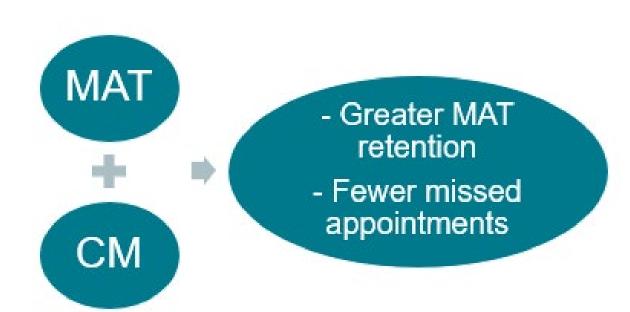
#### Framework for Reporting Adaptations and Modifications-Expanded (FRAME)

| Constructs  | Category examples                           |
|---|---|
| When was modification made?                       | Pre-implementation, implementation          |
| What is modified?                                 | Content, context, training                  |
| At what level of delivery?                        | Patient, clinician, clinic                  |
| What is the nature of the modification?           | Shortening/lengthening, loosening structure |
| What is the anticipated impact of the adaptation? | Increase reach, retention, feasibility      |

### **Contingency Management (CM) as an Adjunct Treatment**

#### UC San Diego Owen Clinic – HIV care clinic

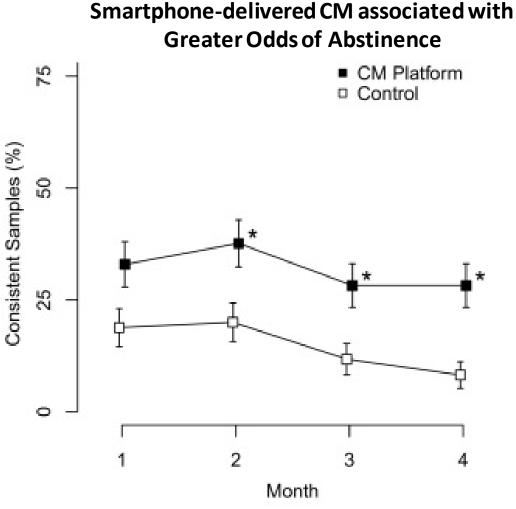
- Approximately 75% of patients on MAT for opioid use disorder also use methamphetamine
- Retention rate on MAT
   is approximately 33%
  - Of those not, approximately
     90% also use
     methamphetamine





### Smartphone-delivered Contingency Management







# Hybrid Type 1 Pilot Study of contingency management, with a focus on the following outcomes:







## **POLL #4**

Our program reaches patients/clients through 'hook-up' Apps

A. YesB. NoC. Maybe? I'm not sure

## **Hookup Apps for Sex and Meth**





## **Hookup Apps for Sex and Meth**

### We need to talk about how Grindr is affecting gay men's mental health

I'm a gay psychiatrist. Here's why I went on Grindr to survey men. By Jack Turban | Apr 4, 2018, 9:50am EDT

#### 🈏 📝 share

When I open the Grindr app on my smartphone, I see there's a 26-year-old man with tanned abs just 200 feet away. He's called "looking4now," and his profile explains that he wants sex at his place as soon as possible.

Scrolling down, I find 100 similar profiles within a one-mile radius of my apartment in Boston. I can filter them by body type, sexual position (top, bottom, or versatile), and HIV status.

As a gay psychiatrist who studies gender and sexuality, I'm thrilled with the huge strides we've made over the past decade to bring gay relationships into the mainstream. The



#### Most Happy

|                    | % of Users<br>Happy |
|--------------------|---------------------|
| 1. Calm            | 99% 🙂               |
| 2. Google Calendar | 99% 🙂               |
| 3. Headspace       | 99% 🙂               |
| 4. Insight Timer   | 99% 🙂               |
| 5. The Weather     | 97% 🙂               |
| 6. MyFitnessPal    | 97% 🙂               |
| 7. Audible         | 97% 🙂               |
| 8. Waze            | 96% 🙂               |
| 9. Amazon Music    | 96% 🙂               |
| 10. Podcasts       | 96% 🙂               |
| 11. Kindle         | 96% 🙂               |
| 12. Evernote       | 96% 🙂               |
| 13. Spotify        | 95% 🙂               |
| 14. Weather        | 95% 🙂               |
| 15. Canvas         | 95% 🙂               |

#### Most Unhappy

Daily Usage (Minutes)

|                     | % of Users<br>Unhappy | Daily Usage<br>(Minutes) |
|---------------------|-----------------------|--------------------------|
| 1. Grindr           | 77% 🙁                 | 61                       |
| 2. Candy Crush Saga | 71% 🙁                 | 46                       |
| 3. Facebook         | 64% 🙁                 | 59                       |
| 4. WeChat           | 62% 🙁                 | 97                       |
| 5. Candy Crush      | 59% 🙁                 | 47                       |
| 6. Reddit           | 58% 🙁                 | 56                       |
| 7. Tweetbot         | 58% 🙁                 | 78                       |
| 8. Weibo            | 57% 🙁                 | 73                       |
| 9. Tinder           | 56% 🙁                 | 22                       |
| 10. Subway Surf     | 56% 🙁                 | 32                       |
| 11. Two Dots        | 53% 🙁                 | 34                       |
| 12. Instagram       | 51% 🙁                 | 54                       |
| 13. Snapchat        | 50% 🙁                 | 61                       |
| 14. 1010!           | 45% 🙁                 | 35                       |
| 15. Clash Royale    | 42% 🙁                 | 58                       |

# Mobile Apps and (Un)Happiness



Int J Environ Res Public Health. 2020 Sep; 17(18): 6500. Published online 2020 Sep 7. doi: <u>10.3390/ijerph17186500</u> PMCID: PMC7557852 PMID: <u>32906632</u>

#### Dating Apps and Their Sociodemographic and Psychosocial Correlates: A Systematic Review

Ángel Castro\* and Juan Ramón Barrada

► Author information ► Article notes ► Copyright and License information Disclaimer

This article has been cited by other articles in PMC.

#### Abstract

Go to: 🕑

The emergence and popularization of dating apps have changed the way people meet and interact with potential romantic and sexual partners. In parallel with the increased use of these applications, a remarkable scientific literature has developed. However, due to the recency of the phenomenon, some gaps in the existing research can be expected. Therefore, the objective of this study was to conduct a systematic review of the empirical research of the psychosocial content published in the last five years (2016–2020)

# Hookup Apps: A Systematic Review



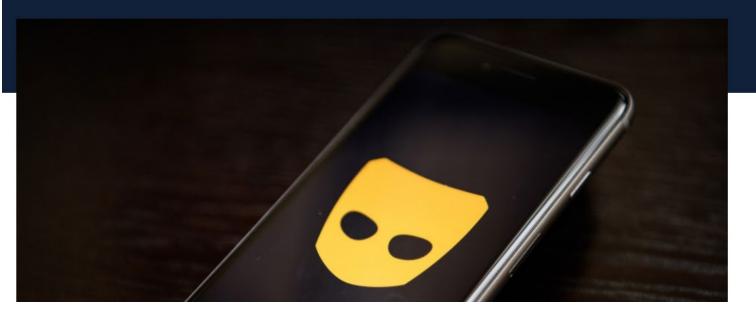
## Hookup Apps vs. Recovery

#### Got Meth? There's an app for that



# Sex and drugs: Popular gay dating app allows users to find more than a date

Despite Grindr's past efforts to address the selling and promoting of drugs on its app, those who use it say there's still a robust market for illicit substances.







## **SOCIAL NETWORKS**

# **SAFE SPACES**

# RESOURCES



# Max Sepulveda, MPA

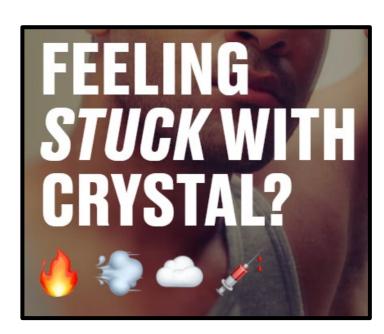
Managing Director of Harm Reduction Services, Housing Works



## Recharge

### Who is Recharge For?

- Designed for HIV negative men who have sex with men and individuals of trans experience who have sex with men.
- We are committed to the practice of harm reduction, which means that you can continue to use meth while accessing services. Re-Charge will meet you where you are and help you reach your health and wellness goals.







## Recharge

#### What does Recharge do?

- Prevention program seeks to reduce new HIV infections and poor HIV treatment outcomes among New Yorkers who use Crystal Methamphetamine
- Clients are engaged through targeted outreach in the community
- Identified clients are provided with Health Education to reduce harms associated with Methamphetamine use, connected to clinical services, and provided linkage to services for case management and support services









Re-Charge is an open, sex-positive, safe space. Learn about safer use and explore a strategy that works for you.

## **Services Offered**

#### **HIV Prevention**

• PEP and PrEP Services

#### **Psychiatric Services**

- Medication and Pharmacotherapy
- Medication Assisted Treatment

#### **Medical Services**

- Connection to Primary Care
- STI Testing/Treatment

#### **Benefits Navigation**

• Connection to Benefits and Insurance.

#### Linkage to Services/Case Management

- 1 on 1 Substance Use Counseling
- Supplemental Mental Health Services (not intended to be long-term)
- Group Services (with limited capacity, 5 maximum)
- Acupuncture and Supportive Services
- Come down space for people to "come down" from crystal meth usage
- Overdose prevention services, with the inclusion of Fentanyl strips and Narcan dispensation
- Same day rapid HCV/HIV testing services



# Harm Reduction means "lowering the barriers needed to access care".

This means...

- Providing access to program enrollment via walk-in or over the phone during business hours.
- Providing a space to engage someone honestly about their use and changes they wish to make in their life.
- We do not challenge the thoughts and feelings of a person, but allow them autonomy to feel, think and speak about the barriers and challenges they face through a radical non-judgmental lens.
- Work to focus on solutions, rather than symptomology.





# Harm Reduction means "lowering the barriers needed to access care".

This means...

- We do not pathologize clients; we treat them as human beings and take a humanistic and client centered approach to their treatment.
- As addiction is a brain disease, we do not discourage nor promote substance use with those using, but rather discuss changes and alternative strategies to reduce harmful health outcomes associated with substance use.
- We acknowledge stigma plays a significant role in the access to services. We work to
  advocate against drug stigma users faced and challenges accessing Health and Social
  Services.







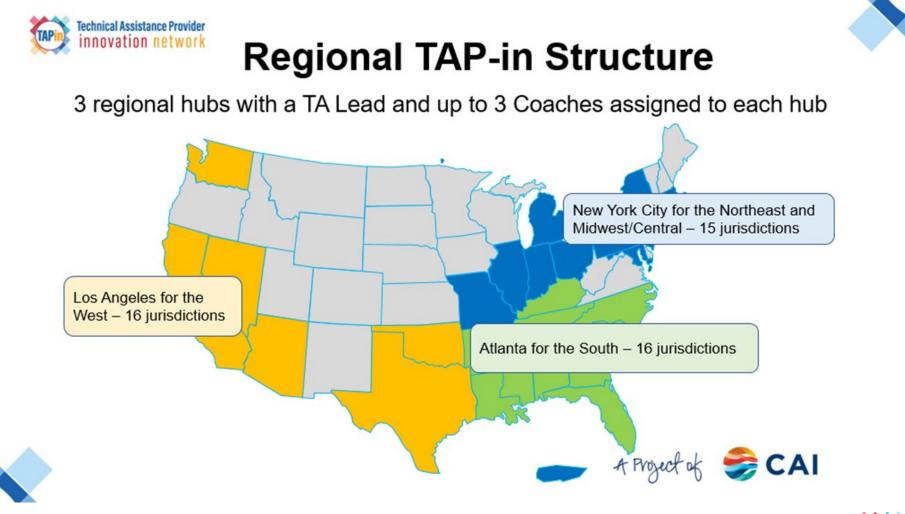
## Poll #5

What is the best next step for your jurisdiction?

- 1. Hold planning council meeting on Meth and HIV
- 2. Explore possibility of contingency management interventions
- 3. Consider "safe spaces" and social networks for working with Meth users
- 4. Cross-train staff on HIV, Meth, and mental health
- 5. Other (write into chat)



## Where to Get Help





# Addressing Meth in Your EHE Strategies

- Priority populations identified in the 47 EHE jurisdictions
  - Gay/MSM of color in 29 jurisdictions
  - $\circ$  Youth in 25 jurisdictions
  - Unstably housed/homeless in 8 jurisdictions
- Jurisdictions prioritizing these populations should be addressing meth use in their EHE strategies.
- TAP-in can help!





#### What We Can Do For You

- Develop a tailored jurisdictional TA plan
- Provide on demand technical assistance
- Assist in the development of a data dashboard
  - Provide access to a pool TA providers
- Link to regional and national resources
- Facilitate peer to peer expert consultation
- Link you to additional training and

resources





# How to Request TA



## Email: tap-in@caiglobal.org



# 







#### WE WANT TO HEAR FROM YOU!

In order to complete our evaluation, you must be registered for this webinar. If you have not registered, please register using the link in the chat. Thank you!



