Implementing Contingency Management to Treat Stimulant Use Disorder in Opioid Treatment Programs

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Integrated Substance Abuse Programs

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What we say and how we say it inspires the hope and belief that recovery is possible for everyone.

Affirming, respectful, and culturally-informed language promotes evidence-based care.

PEOPLE FIRST

Language Matters

in treatment, in conversation, in connection.

JUNE ACKNOWLEDGEMENTS

LGBTQ + PRIDE MONTH
and
JUNETEENTH

Disclosures

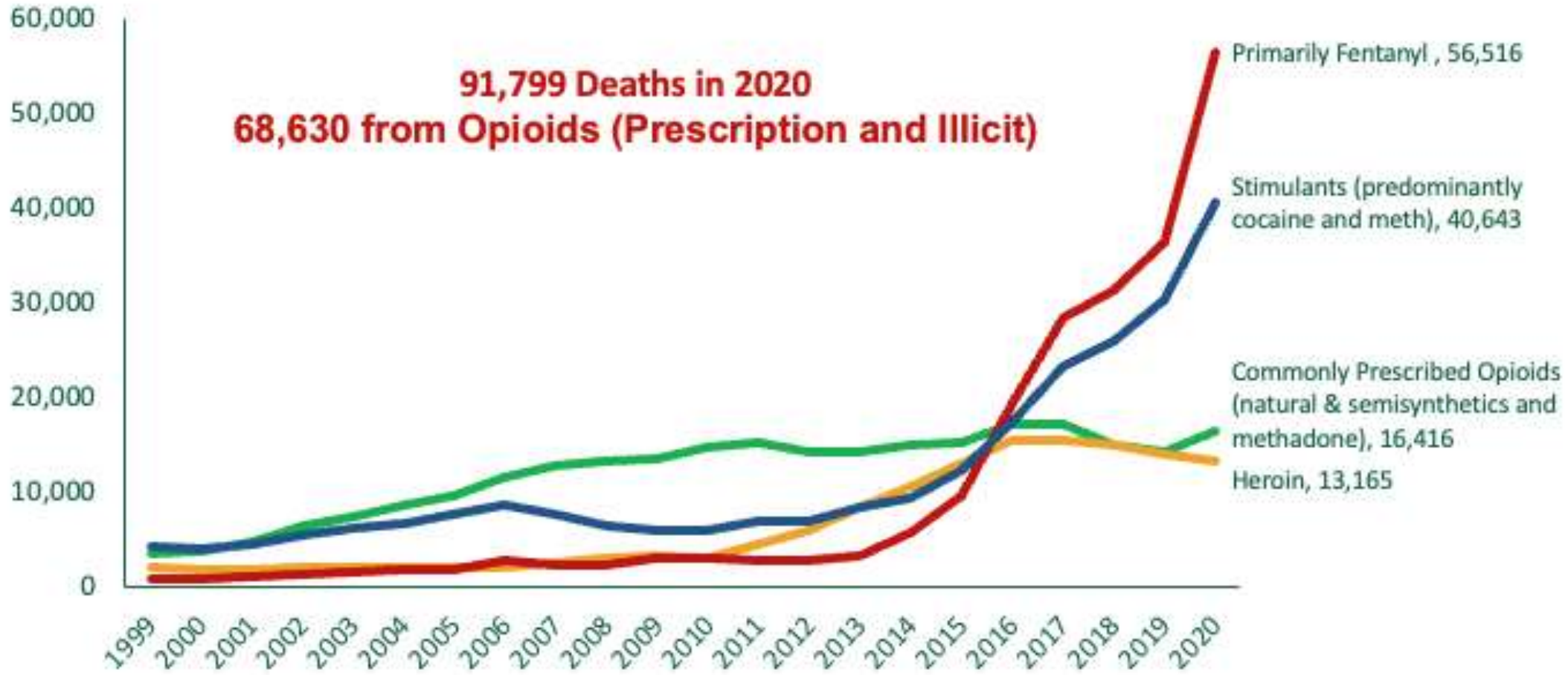
None of the presenters, planners, or others in control of content for this educational activity have relevant financial relationships to disclose with ineligible companies whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients.

Learning Objectives

- Describe at least three waves of the drug poisoning crisis.
- List the four essential ingredients of contingency management.
- Recall at least three facilitators and three implementation challenges experienced by opioid treatment program and other outpatient treatment sites implementing contingency management.

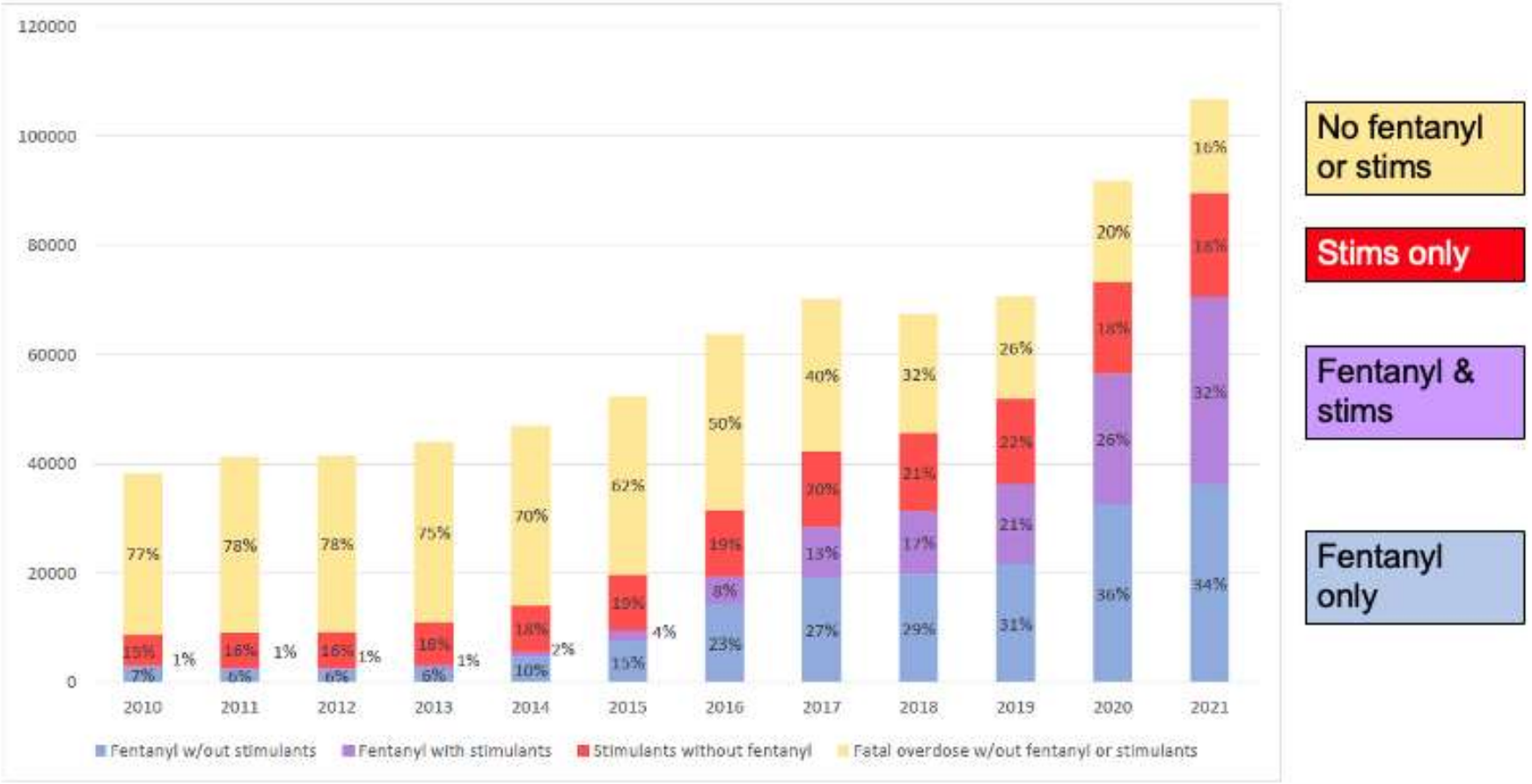
Evolution of Drivers of Overdose Deaths, All Ages

Analgesics → Heroin → Fentanyl → Stimulants



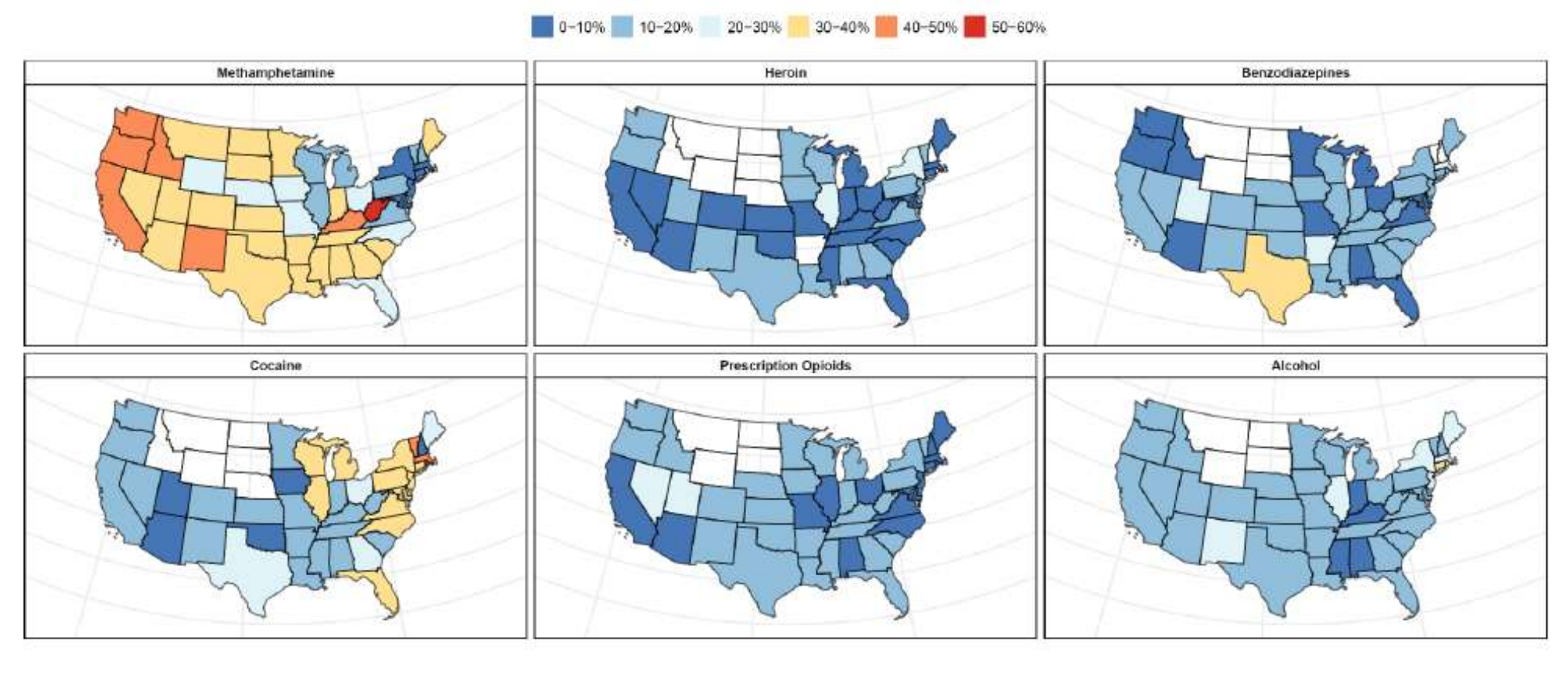
Results

Overdose Deaths by Fentanyl and Stimulant Presence, 2010-2021



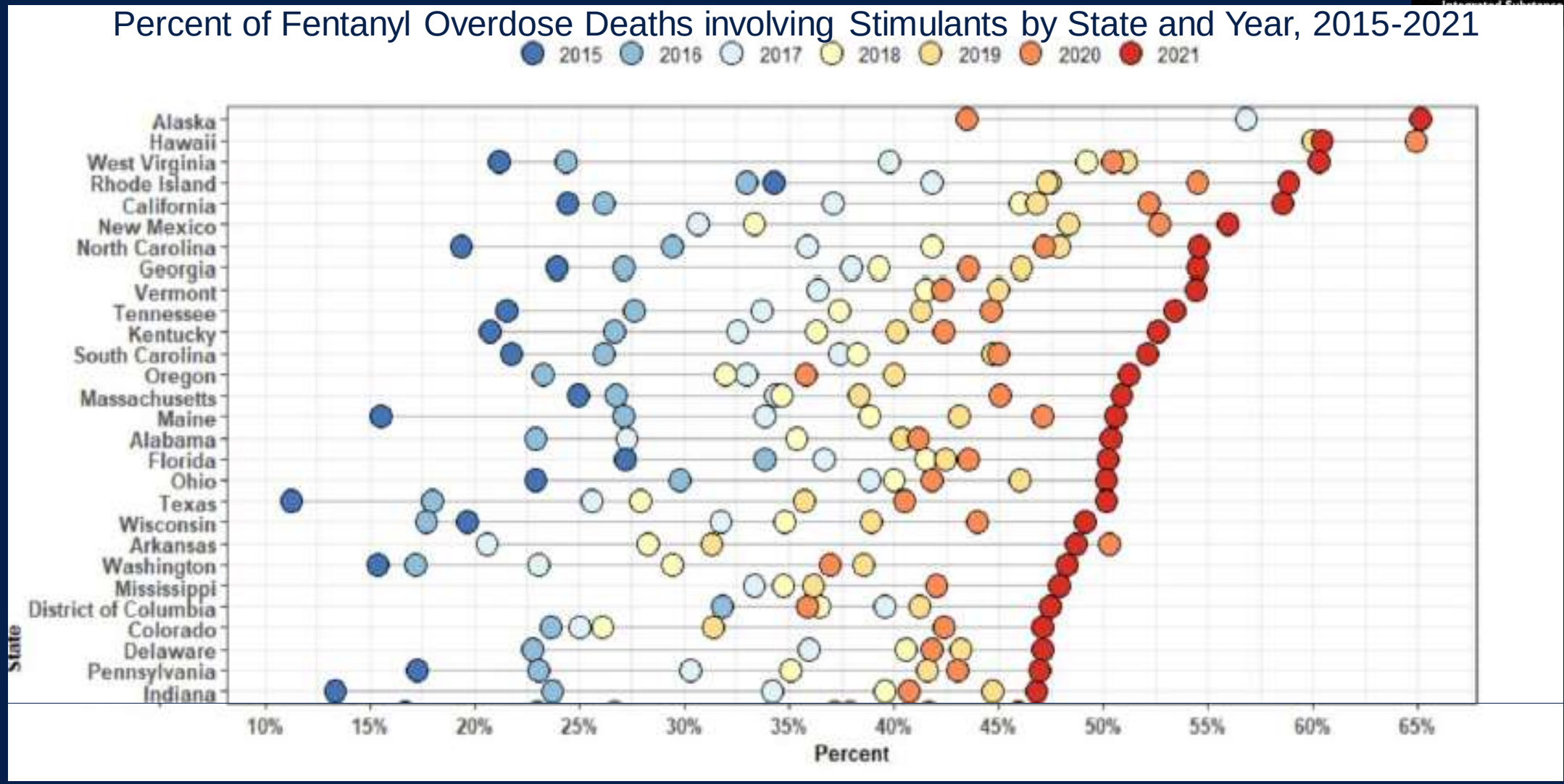
SOURCE: Friedman & Shover, 2023

Percent of Fentanyl Overdose Deaths Containing Other Drug Classes by State, 2021



SOURCE: Friedman & Shover, 2023

Results (continued)



SOURCE: Friedman & Shover, 2023

Clinical Challenges of Working with People with a Stimulant Use Disorder

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- Overdose death
- Limited understanding of stimulant use disorder
- Ambivalence about need to stop use
- Impulsivity/poor judgement
- Cognitive impairment and poor memory
- Anhedonia
- Hypersexuality
- Violence and psychosis
- Powerful Pavlovian trigger-craving response
- Very poor retention in outpatient treatment
- Elevated rates of psychiatric co-morbidity
- Sleep disorders

SOURCES: SAMHSA, 2020; UNODC, 2019

Limitations of Existing Treatments for Stimulant Use Disorder

- No FDA-approved pharmacotherapy for stimulant use disorder
- Few evidence-based practices available, including MI, CBT, CRA (some evidence for efficacy)
- Contingency management is the most effective evidence-based behavioral treatment for StimUD, but has not been widely adopted outside of the VA, due to regulatory challenges
- People who use stimulants are less likely to report the desire to reduce or stop use (Banta-Green et al., 2020), seek treatment (McMahan et al., 2020), or be retained in treatment (Lappan, Brown, & Hendricks, 2020; Tsui et al., 2020) than people who use other substances

SOURCES: Banta-Green et al., 2020; Lappan, Brown, & Hendricks, 2020; McMahan et al., 2020; Tsui et al., 2020

Research Support for Contingency Management

CM for Stimulants: Research Summary (1)

- CM is the most effective way to help people stop using stimulant drugs (AshaRani et al., 2020; Bentzley, et al., 2021)
- Over 60 studies demonstrating that CM works to reduce stimulant use for people who are receiving MOUD (Medications for Opioid Use Disorder) treatment (Bolívar et al., 2021)
- CM has a higher retention rate than other stimulant use disorder treatments (Higgins et al., 1994)

SOURCES: AshaRani et al., 2020; Bentzley et al., 2021; Bolívar et al., 2021; Higgins et al., 1994;

CM for Stimulants: Research Summary (2)

- The effects of CM can last for up to one year after the intervention ends (Ginley et al., 2021)
- CM that targets stimulant abstinence leads to reduced alcohol use, cigarette smoking, depressive symptoms, and psychiatric hospitalizations (Miguel et al., 2017; McDonell et al., 2021b)
- CM is cost effective (Olmstead & Petry, 2009)

SOURCES: Ginley et al., 2021; McDonell et al., 2021b; Miguel et al., 2017; Olmstead & Petry, 2009

CM for Stimulants: Research Summary (3)

Cultural factors:

- CM has demonstrated efficacy in the U.S., Brazil, China, and other countries (Hser et al., 2011; Miguel et al., 2022)
- CM has been adapted, tested, and found to be effective in partnership with American Indian and Alaska Native communities (McDonell et al., 2021a; McDonell et al., 2021b)
- CM has demonstrated efficacy for reducing methamphetamine use among Men Who Have Sex With Men (MSM) (Shoptaw et al., 2006)

Other Populations:

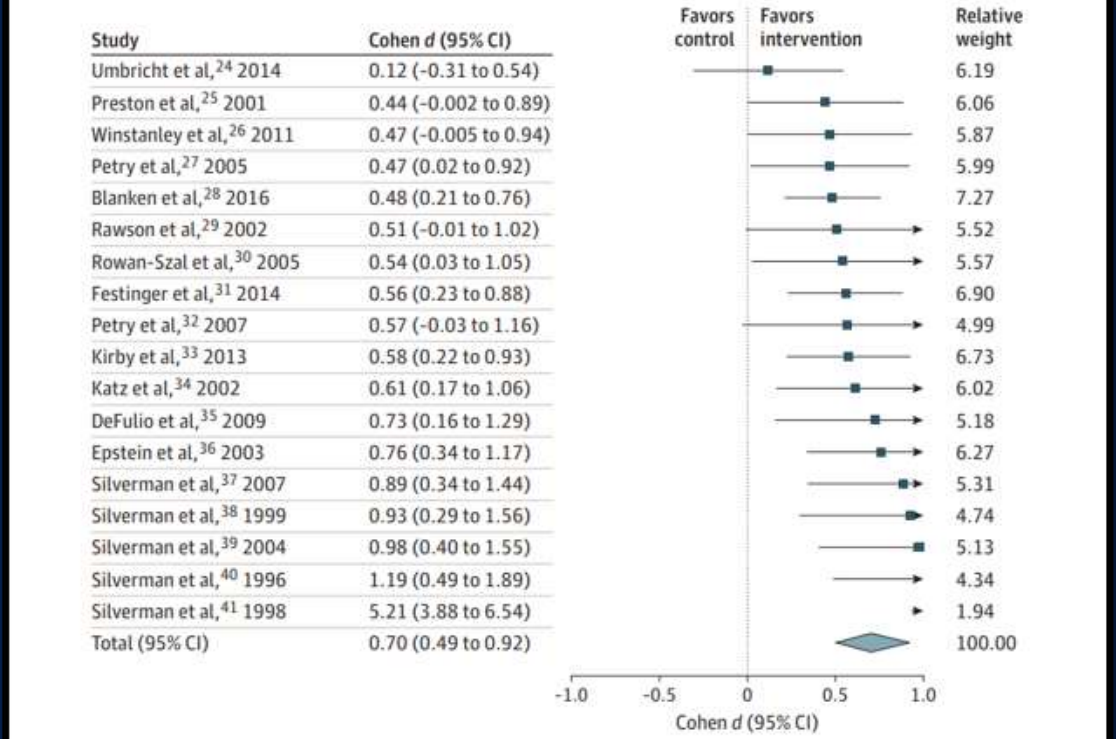
- CM is associated with reductions in substance use in populations with co-occurring serious mental illness (McDonell et al., 2013; Bellack et al., 2006)

SOURCES: Bellack et al., 2006; Hser et al., 2011; McDonell et al., 2013; McDonell et al., 2021a; McDonell et al., 2021b; Miguel et al., 2022; Shoptaw et al., 2006

CM for MOUD Patients (1)

- Meta-analysis of **60 studies** of CM for MOUD patients
- CM Targets:
  - **Stimulant use** (large effect size)
  - **Other substance use** (medium effect size)

Figure 2. Forest Plot of Treatment Effect Sizes of Contingency Management vs Controls: Abstinence From Psychomotor Stimulant Use



SOURCE: Bolívar et al., 2021

Contingency Management for MOUD Patients (2)

- **Other CM Focus Behaviors:**
  - Psychomotor Stimulant Use (Large Effect Size Cohen d=0.70)
  - Illicit opioid use (Large Effect Size Cohen d=0.58)
  - Cigarette smoking (Large Effect Size Cohen d=0.78)
  - Medication adherence (Large Effect Size Cohen d=0.75)
  - Therapy attendance (Medium Effect Size, Cohen d=0.43)
  - Polysubstance use (Medium Effect Size Cohen d=0.46)

SOURCE: Bolívar et al., 2021

Project MIMIC

- Description: A program that provides the chance to win prizes for achieving and maintaining attendance goals.
- Number of Clients: 25 new adult admits who are prescribed MOUD
- Duration: 12 weeks
- CM Schedule (using Fishbowl Method): Starts at 1 draw, escalates by 1 draw each week that client meets **attendance goal**.
  - Each draw has a 50% chance of winning a prize (value ranges from $1-$100)
  - Prizes include toiletries, gift cards, small electronics, and more
  - Total Possible Draws: 78 [meeting attendance goal for all 12 weeks]

SOURCE: Becker et al., 2021

Participants in Methadone Treatment with Specified Weeks of Continuous Stimulant- and Alcohol-Negative UDTs

Time, Week	CM Group (n=198)	Usual Care (n=190)	OR (95% CI)+
≥4	23.7%	9.0%	**3.1 (1.7-5.7)**
≥8	16.7%	2.1%	**9.3 (3.2-26.7)**
≥12	5.6%	0.5%	**11.1 (11.4-86.5)**

SOURCE: Peirce et al., 2005

Setting the Context

- California has had a major stimulant problem for 30+ years.
- More Californians were admitted into a treatment program for a stimulant-related problem than any other substance in 2020 and the first quarter of 2021 (DHCS, CalOMS, 2022).
- National data indicates that stimulant use has be increasing significantly in recent years along with associated overdose deaths. Interventions to reduce stimulant use are critically needed (NIHCM Foundation, 2021; SAMHSA, 2021).
- Contingency Management (CM) has dozens of studies and six meta-analyses supporting the efficacy of CM for stimulant use disorders (Hadich, 2010; Knapp et al., 2007; DeCrescenzo et al., 2018; Brown & DeFulio, 2020; Bentzley et al., 2021; Farrell et al., 2019).

Recovery Incentives: California's Contingency Management Benefit Pilot Program Overview

- The California CM Pilot is the first large-scale implementation of CM for treating stimulant use disorder outside the Department of Veterans Affairs (VA).
- This project is the first implementation of CM to be approved to be covered under Medicaid as part of the CalAIM 1115 Demonstration.
- CM implementation will require a very new set of procedures and knowledge and skills.
- The successful use of CM will require the implementation of a very specific protocol/methodology.
- All providers/personnel delivering CM will be required to vigorously follow the procedures of the protocol.
- The methods of delivering and accounting for incentives will be very similar to procedures used for dispensing medications.

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The Four Essential "Ingredients" of CM

1. Clearly define a single behavior
2. Frequently measure behavior
3. Provide tangible incentives soon after behavior is observed
4. Withhold incentive when behavior is not observed while ***maintaining supportive attitude***

1. Clearly Define the Behavior Goal

Goal: Stimulant abstinence measured by point-of-care Urine Drug Test (UDT)

- **Focused:** does not require abstinence from other substances, only stimulants
- **Objective:** does not rely on self-report, relies on UDTs
- **Immediate results:** essential for positive reinforcement
- **Feasible:** cost effective for frequent use, does not take specialized training
- **Achievable:** a 2 to 4-day stimulant metabolite detection window means rewards can be earned within first few days of abstinence

2. Frequently Measure the Behavior

- Collect urine tests and provide incentives:
  - Ex: ***2 x per week for weeks 1-12***
  - Ex: ***1 x per week for weeks 13-24***

- Communicate attendance requirements (missed visit means missed opportunity for reward and reset of recovery incentive value to baseline)

- Schedule on non-sequential days (e.g., Mon/Thurs or Tues/Fri)

3. Provide Desirable/Immediate Rewards

Desirable:

- An Incentive Manager vendor can provide a wide array of options for incentives
- Starting value of $10 per stimulant-negative UDT, increasing by $1.50 for every week of non-use of stimulants (i.e., two consecutive stimulant-negative UDTs)

Immediate:

- Incentives can be electronically delivered, with the option to print gift cards onsite for those without reliable access to technology

4. Contingent AND Positive

Contingent:

- No incentive given when urine test is not submitted or is positive for stimulants

Positive:

- Encouragement/support is offered without punishment even if the urine drug test is positive for stimulants

CM's Special Sauce: Escalation, Reset, Recovery (1)

Escalation: participants earn escalating recovery incentives with continuous abstinence from stimulants

- Research shows that using an escalating schedule of reinforcement, which includes reset, leads to longer periods of abstinence

SOURCE: Roll & Shoptaw, 2006

Full Incentive Schedule with 100% Negative UDT

1	10.00 + 10.00	20.00
2	11.50 + 11.50	23.00
3	13.00 + 13.00	26.00
4	14.50 + 14.50	29.00
5	16.00 + 16.00	32.00
6	17.50 + 17.50	35.00
7	19.00 + 19.00	38.00
8	20.50 + 20.50	41.00
9	22.00 + 22.00	44.00
10	23.50 + 23.50	47.00
11	25.00 + 25.00	50.00
12	26.50 + 26.50	53.00

Week	Incentive (1x/week)	
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
Total	**161.00**	**599.00**

CM's Special Sauce: Escalation, Reset, Recovery (2)

Reset: temporary return to initial recovery incentive level i.e., $10

- *Stimulant-positive or missed UDT results in no recovery incentive that day*
- *The next stimulant-negative UDT resets the recovery incentive to its initial level*

- Because 'reset' is discussed ahead of time, participants know they have a lot to gain from keeping up their great work
- The desire to "maintain their progress" may be as motivating as the actual monetary value of the escalated recovery incentives

CM's Special Sauce: Escalation, Reset, Recovery (3)

Recovery: The escalated recovery incentive value is recovered after 1 week of abstinence

- *2 consecutive stimulant-negative UDTs triggers immediate "recovery" of the previously earned, escalated incentive amount*
- *Clients do **not** need to work their way back up the escalation schedule to where they were when they tested positive for stimulants*

- With 'recovery,' participants regain their hard-earned, escalated recovery incentive values quickly so that one use of a stimulant does not lead to giving up

What CM Is and Is Not

CM is *NOT*…	CM is…
A candy bowl on your desk	Purposeful; done with skill-based on set of key principles
Providing people with services, resources, help, or charity	An intervention that leverages positive reinforcement in a particular way
"Paying people not to use"	An intervention that: • Builds confidence • Enhances morale for participants and staff • Improves therapeutic relationships • Creates opportunities to celebrate • Can help people reduce stimulant use

Use a Positive Approach

- Reframe the use of UDTs (rewards vs. punishment)
- Stay encouraging by focusing on next opportunity to earn a recovery incentive
- Emphasize the lack of punishment/ negative consequences
- Gets clients excited about treatment – they have something to look forward to
- Helps build the therapeutic alliance

Urine Testing in CM: Flip the Script!

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Urine testing in standard SUD treatment

- Focused on the consequences of positive test results
- Often requires abstinence from all substances
- Lab-based testing often required
- Infrequent testing (e.g., monthly)
- May have external implications (e.g., legal, child custody)

Urine testing in Stimulant-focused CM

- Focused on celebrating negative test results
- CM incentives are based on stimulant UDT results only!
- Point of Care tests preferred
- Twice-weekly for 12 weeks, once/week for another 12 weeks
- Urine tests meant for therapeutic intervention, not legal record

Make Use of Motivational Interviewing Concepts

- **Compassion:** Having a genuine sense of "unconditional positive regard" for another person; what this person experiences *matters to you*

- **Empathy:** Understanding the world from another person's perspective; being genuinely curious about how they see and experience the world, and being able to communicate that understanding to the client

Helpful Phrases to Foster Encouragement, Engagement, and Retention in Treatment

- *"Sounds like you had a tough weekend. I'm so glad you came in today and told me about it. You'll have another opportunity to earn incentives on Thursday! Is there anything I can do to support you until then?"*
- *"You earned your first recovery incentive today! Nice job!! Remember you'll earn even more the longer you stay abstinent!"*
- *"Wow… you've attended 8 visits in a row and tested negative at all those visits. That is outstanding work. I bet you are enjoying all the recovery incentives you have earned. What are you planning to do with your future earnings?"*
- *"You sound disappointed today because it was the first positive test you've had in a while. You still came in today, which shows a lot of commitment and motivation, so pat yourself on the back. And don't forget, you can get right back to the incentive level you were at before in just a week! What do you have planned for your next week or two of earnings?"*

What Enrolled Members are Saying about CM

"My kids call me Dad again."

"I've been invited to family functions because I'm sober."

"My Mom is proud of me for the first time in years."

"It gave me something to look forward to, a schedule."

"[Recovery Incentives] makes me feel 'powerful' not 'powerless.'"

CM Recommendations for Safe Harbor Requirements

- Do not advertise the use of incentives as part of treatment
- Document need for CM in treatment plan (i.e., client has a moderate or severe stimulant use disorder)
- Use a research-based CM protocol
- Carefully document that incentives are linked to client outcomes by carefully documenting each urine drug test result and corresponding incentive that was given for the negative test
- Regularly evaluate the impact of CM on client outcomes and implement quality improvement procedures to document CM effectiveness
- Avoid tying CM visits with another Medicaid/Medicare billable encounter

Some of these rules may be modified from programs with CMS approval to conduct CM services as a Medicaid/Medicare benefit; any adaptation should be done in careful consideration from state regulatory authority.

Contingency Management Success Stories

- A member shared that last year he was steeling Christmas gifts, and this year, he was buying them.
- Another member went from jail, to residential treatment, to outpatient treatment and the Recovery Incentives Program, to getting a job at the site he was receiving CM services from as a maintenance worker.
- One member involved his sons in his treatment plan. He had each son pick a vendor from the IM Portal. One son picked Game Stop, and the other Walmart. Every time he came home from a CM visit, his kids would ask *'how much did we get today?'* The member did not want to disappoint his kids so that keeps him motivated to continue to test negative and bring home earned incentives.
- Upon completion of the Program, a member received a certificate of completion. He said it was the first time he's ever completed anything in his entire life.

SOURCE: Recovery Incentives Program: California's Contingency Management Benefit

Testimonials from CM Team Members

- *"It's not just about the gift cards. It's about the feelings of safety, wellbeing, self-efficacy and more."* (1-17-24)
- *"I've done over 400 CM sessions and have given over 4,000 in incentives. One day a beneficiary gave her incentives to her kids. She got a job at a shelter and got a new pair of work shoes. We saw in action how she made the connection that she can move forward without stimulants."* (7-19-23)
- *""It makes me feel great as a coordinator to see this as well. At first, I was against the program, but when I started seeing the clients and their results, and hearing the stories, it really changed my perspective on the program."*

SOURCE: Recovery Incentives Program: California's Contingency Management Benefit

Implementation Themes – Scheduling, Incentive Delivery, and other Logistics

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Facilitators

- Reminder calls/appointment cards
- Continued engagement despite stimulant-positive UDTs
- Good variety of gift card vendors
- Scheduling CM visits on same day as other OP/OTP services (medication, counseling, etc.)
- Increased participation in other OP/OTP services

Challenges

- Transportation barriers
- Schedule changes during holidays
- Stores not honoring gift cards
- Language barriers
- Difficulties adhering to less frequent UDT testing in weeks 13-24

SOURCE: Recovery Incentives Program: California's Contingency Management Benefit

Implementation Themes – Enrollment

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Facilitators

- Word of mouth
- Outreach at HIV/testing vans, with those experiencing homelessness
- Collaboration/communication with other agencies
- Step-down from residential treatment to OP treatment

Challenges

- Difficulty with recruiting from outside current OP/IOP/OTP clients

SOURCE: Recovery Incentives Program: California's Contingency Management Benefit

Implementation Themes – Staffing and Administration

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Facilitators

- Staff joy and enthusiasm with member success
- CM coordinator does intake and all CM activities – makes process more seamless

Challenges

- Staff turnover and workforce shortages
- Delays onboarding new CM Coordinators due to time it takes to complete training/IM Portal practice cases

SOURCE: Recovery Incentives Program: California's Contingency Management Benefit

Common Challenges of Implementing CM (1)

- Resistance to the idea of incentives, i.e., “Why do clients need extrinsic motivation?”
  - *Overcome with education and testimony from clients*

- Working twice-weekly visits into clinic workflow
  - *CM visits only take 10-15 mins*

Common Challenges of Implementing CM (2)

- Challenges of tracking incentive escalation, reset, and recovery and recovery incentive distribution

- Office of the Inspector General (OIG) prohibits the use of incentives to pay clients for billable encounters (anti-kick back regulations)
  - *Most contingency management programs must comply with OIG-defined Safe Harbor requirements. It is critically important to follow a defined protocol to avoid potential for fraud or the appearance of kickbacks.*

Barriers to Implementation

- CLIA-Waiver requirements
- Staffing/Hiring
- Funding
  - Clinical Services
  - Incentives
  - $75 cap
- Training to research levels of fidelity

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Facilitators to Implementation

- Standard research-based protocol
- Start-up funding for sites
- Rigorous training/implantation requirements
- Flexible application of protocol at local sites

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Thank you for your time!

- Beth A. Rutkowski, MPH (brutkowski@mednet.ucla.edu)

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