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A Call to Action: Evidence-based Contingency Management

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As a clinician and addiction researcher, if a family member or friend were to say "my child/sibling/parent has a stimulant use disorder. I want the best treatment for them." I would quickly reply that contingency management (CM) is the most robust and evidence-backed treatment option. Sadly, I would have to follow-up that statement with an acknowledgement that few persons seeking substance use disorder treatment in the U.S. will have access to an evidence-based version of this intervention. Instead, contingency management is either unavailable, or perhaps worse, offered in a manner that deviates from known parameters associated with efficacy. Now, imagine facing this same exchange on repeat with dozens of patients and family members of patients. It is demoralizing as a researcher in this field, and maddening as a clinician, to know this effective treatment exists but patients cannot access it.

Our scientific community has provided a plethora of evidence to support CM's efficacy over the past 40 years; however, CM's reach into clinical practice is stymied by regulatory and policy barriers and is characterized by poor adherence to evidence-based versions of CM. We offer the attached expert consensus statement calling for:

1) increased access to evidence-based CM interventions to treat stimulant use disorder,
2) federal agencies to provide the necessary regulatory reforms and funding necessary to accomplish this goal, and
3) the development of specific, approved protocols that include best practices in CM.

Now is the time for action – for those with lived experience and their family members, for advocacy organizations, for providers, and for states and treatment organizations to demand access to this treatment. Now is the time for federal agencies to ease the path forward to making CM accessible and effective. And now is the time for our CM scientists and experts to provide strong guardrails to ensure that CM protocols are enacted with fidelity in order to benefit patients in need.

Carla Rash on behalf of the Contingency Management Consensus Document Writing Group (Michael McDonell, Tyler Erath, Sara Parent, Rick Rawson, & Sarah Wattenberg)

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Consensus Statement: Contingency Management for Stimulant Use Disorder

The Problem: Effective Stimulant Treatment is Needed to Solve the Overdose Epidemic

The overdose epidemic is at an all-time high, with an estimated 107,477 deaths for the 12-month period ending in August 2022. [1] A large proportion of these deaths are driven by the concurrent use of fentanyl and stimulant drugs, such as methamphetamine and cocaine. Overdose deaths involving fentanyl and stimulants rose almost 60-fold between 2010 and 2021 in the United States. [2] To combat this "fourth wave" of the overdose epidemic, evidence-based treatment is urgently needed. Although effective medications are available to treat opioid use disorder, no FDA-approved medications exist for the treatment of stimulant use disorder.

A Solution: Contingency Management

Contingency management (CM) is a highly effective, but under-utilized behavioral treatment for stimulant use disorders. [3-6] CM is based on operant conditioning principles. It uses tangible reinforcers, such as gift cards or merchandise (e.g., clothing, toiletries) to promote abstinence from stimulant use. These items can be earned when specific, objective, and verifiable 'target behaviors' are demonstrated. Reinforcers are not provided when target behaviors are not achieved. In CM for stimulant use disorder, the target behavior is typically recent stimulant abstinence as assessed by a point-of-care urine drug test.

Two CM models are well supported by research and can feasibly be delivered in outpatient treatment settings: voucher and prize draw CM. In voucher CM, individuals earn a set financial payment contingent on a stimulant-negative drug test. This amount increases with consecutive stimulant-negative drug tests. For instance, a person could earn $10 for their first stimulant-negative drug test. They would then receive $12 for their second consecutive stimulant-negative test and $14 for their third consecutive stimulant-negative test. In contrast, people in a prize draw protocol receive one or more draws. In each draw, they can receive an encouraging message (e.g., Good Job) or a prize that varies from $1 to $100. The odds of earning a small prize are higher than earning a larger prize. Like the voucher system, the number of draws escalates the longer the individual demonstrates consecutive stimulant-negative drug tests. In both models, participants do not receive a voucher or prize draw when they submit a stimulant-positive urine sample or

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miss an appointment, depending on the targeted goal. However, they are encouraged to keep trying and can continue in the program.

Voucher and prize draw CM are effective in promoting abstinence from stimulants when they are sufficient in magnitude, immediacy, duration, and frequency. Vouchers and prizes must be appealing to patients and offered in a sufficient amount to motivate patients. Deviations from evidence-based CM practices are common [7-9] and are associated with poor outcomes. Therefore, policymakers and funders should be mindful of the importance of adhering to empirically supported intervention standards if they expect to obtain patient outcomes consistent with those obtained in research studies. For further information about the important components and costs of evidence-based CM see Lu and colleagues, 2023. [10]

Contingency Management Research Evidence

More than thirty years of numerous randomized controlled trials demonstrate the efficacy of CM for substance use disorders. [11] Most of this research has focused on the use of CM to treat stimulant use disorder. CM is superior to all other stimulant use disorder treatments. [4] While individual studies have been mixed in terms of CM's impact on long term use, when looking across studies, CM is associated with a small positive effect on use for up to a year after treatment. [12] Additionally, CM focused on stimulant abstinence is associated with other positive outcomes, such as higher levels of treatment retention and attendance, medication adherence, secondary drug and alcohol abstinence, reduced nicotine use, and lower levels of psychiatric symptoms and hospitalizations. [5, 14-15] Multiple economic studies demonstrate that these robust clinical benefits offset the relatively low costs of CM when evidence-based protocols are implemented with fidelity. [16]

CM has been tested with and adapted for diverse outpatient treatment settings and populations. Over 60 randomized controlled trials demonstrate that CM is an effective intervention to reduce stimulant use among individuals receiving medication for opioid use disorder [5], and CM can be successfully adapted and tailored for specific populations, such as American Indian and Native American people, sexual minority groups, and pregnant women. [13, 17-21]

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Implementation in Clinical Settings

In 2011, The U.S. Department of Veteran Affairs (VA) implemented CM across outpatient substance use disorder treatment programs throughout the U.S with high implementation rates and strong fidelity. [22-23] Thus far, the VA is the only national healthcare system in the U.S. to provide CM as treatment-as-usual for patients with stimulant use disorder.

Outside of the VA, CM is not available to most Americans with a stimulant use disorder due to regulatory and funding barriers. In response to the rise in stimulant drug-related deaths, multiple states are overcoming these barriers to provide CM. California and Washington obtained a Medicaid Waiver to provide CM as a covered benefit. Other states, Tribes, and healthcare providers are interested in providing CM as an effective treatment for stimulant use disorder.

Conclusion

This expert group strongly endorses the widespread use of CM in stimulant treatment using evidence-based protocols. We urge the federal government to provide the regulatory reforms and funding necessary to facilitate widespread use of evidence-based CM. We recommend that federal and state agencies endorse specific, approved protocols that include the best practices related to objective and verifiable target behaviors, and appropriate magnitude, immediacy, duration, and frequency of CM reinforcers.

Sincerely,

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