Using Contingency Management To Combat Stimulant Use Disorder

LEGISLATIVE REQUEST

To help address the nationwide harm caused by fentanyl overuse, NABH calls on Congress to direct federal agencies to immediately replace the current \$75.00 Contingency Management incentive payment limitation with scientifically proven incentive levels.

The Fourth Wave of the Opioid Epidemic Requires Evidence-based Solutions

Opioid overdoses are at an all-time high, with an estimated 107,689 drug overdoses for the 12-month period ending October 2022, according to provisional data released on March 5, 2023.¹

The concurrent use of opioids (primarily fentanyl) and stimulants (methamphetamine and cocaine) result in a large proportion of opioid overdose deaths. Continuing a persistent trend, overdose deaths involving fentanyl and stimulants rose almost 60-fold between 2010 and 2021 in the United States.² To effectively combat this "fourth-wave" of the opioid epidemic, policymakers must immediately deploy evidence-based treatments for stimulant use disorder (StUD).

How Contingency Management Works

While there are no FDA-approved medications for the treatment of StUD, there is a highly effective and underused behavioral intervention that reduces stimulant use: contingency management (CM). Decades of research and peer-reviewed literature validate the effective use of CM,³⁴⁶ which uses positive reinforcement to encourage abstinence from stimulant use. Positive behavior reinforcement takes the form of predictable and meaningful financial incentives, such as gift cards (with restricted purchase guidelines) or prizes, which can be earned only when specific 'target behaviors' are achieved, such as drug-free urine samples.

Financial incentives are used because they have been found to compete effectively with the reward of drug use in the brain, thereby allowing the individual to cease drug use and pursue treatment and recovery successfully. Research has demonstrated that to reduce stimulant use, the most effective level of financial incentive is between \$600 and \$1,200 per individual for a 12- to 16-week protocol.⁶ Further, CM indirectly leads to clinical benefits, such as increasing exercise⁷, participate in cardiac rehabilitation,⁸ and improving other chronic conditions and health behaviors.

Modernize CM Policy with an Evidence-based Solution

To fight the current overdose crisis effectively, federal funds must permit CM incentives at evidence-based levels. In 2022, the Substance Abuse and Mental Health Services Administration established current grant-funding policy limits for CM to \$75 per episode. Although this is a well-meaning effort, this level falls far below the amount proven to produce behavior change.

²Friedman, J, Shover, C. medRxiv preprint. Doi.or/10.1101/2022.11.04.2228. Nov 5, 2022.

¹National Center for Health Statistics, Center for Disease Control and Prevention. Chart 12 Month-Ending Provisions Number and Percent Change of Drug Overdose Death, March 5, 2023: https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm.

³Higgins, S. T., Kurti, A. N., & Davis, D. R. (2019). Voucher-based contingency management is efficacious but underutilized in treating addictions. Perspectives on Behavior Science, 42(3), 501-524. https://doi.org/10.1007/s40614-019-00216-z.

⁴AshaRani, P. V., Hombali, A., Seow, E., Ong, W. J., Tan, J. H., & Subramaniam, M. (2020). Non-pharmacological interventions for methamphetamine use disorder: a systematic review. Drug and Alcohol Dependence, 212, 108060.

⁵Bentzley, B. S., Han, S. S., Neuner, S., Humphreys, K., Kampman, K. M., & Halpern, C. H. (2021). Comparison of treatments for cocaine use disorder among adults: A systematic review and meta-analysis. JAMA Network Open, 4(5), e218049-e218049.

⁶Higgins, ST, Heil, SH, Dantona, R, Donham, R. Matthews, M, Badger, J. Effects of varying the monetary value of voucher-based incentives on abstinence achieved during and following treatment among cocaine-dependent outpatients. Addiction, (102),271-281.

⁷Kurti, A. N., & Dallery, J. (2013). Internet-based contingency management increases walking in sedentary adults. Journal of applied behavior analysis, 46(3), 568-581.

⁸Cardiovascular - Gaalema, D. E., Elliott, R. J., Savage, P. D., Rengo, J. L., Cutler, A. Y., Pericot-Valverde, I., Priest, J. S., Shepard, D. S., Higgins, S. T., & Ades, P. A. (2019). Financial incentives to increase cardiac rehabilitation participation among low-socioeconomic status patients: a randomized clinical trial. JACC: Heart Failure, 7(7), 537-546.