Incentivizing Recovery

Contingency Management and Exploring Barriers to SUDs Treatment

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- O1 CHERISH: Contingency Management Conference
- Urban Health Lab: SPARROw Project
- 03 Skills Assessment
- 04 Acknowledgements



Center for Health Economics of Treatment Interventions for Substance Use Disorder, HCV, and HIV



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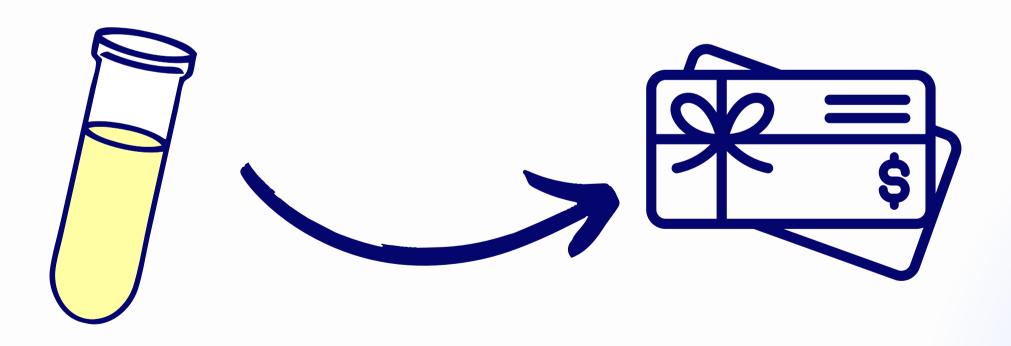
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What is Contingency Management?

con-tin-gen-cy man-age-ment

noun

a behavior-modification method of providing reinforcement in exchange for objective evidence of a desired behavior (1)

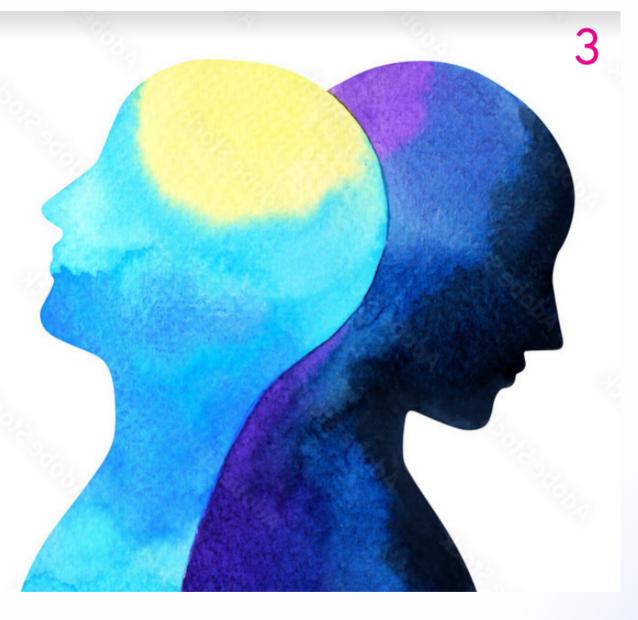


Source: Gold, 1996



INCENTIVIZING RECOVERY

Payment, Policy, and Implementation of Contingency Management





"Contingency management (CM) is a proven and promising treatment for certain substance use disorders, especially stimulant use disorder.

However, major gaps in knowledge regarding the economic, conceptual, policy, political and legal barriers have prevented widespread use.

Important considerations such as equity and adaptations to the current substance use treatment environment have yet to be fully explored".

Project Aims

Complete an extensive CM literature briefing for use at the conference

Develop a tracking sheet of of CM provisions in Medicaid 1115 waivers

Develop a tracking sheet for CM grants nationwide

Methods

• Step 1: Literature search by policy area

Efficacy Barriers Future Research

• Step 2: Systematic Review of Medicaid 1115 Demonstration Waivers

Provisions Eligibility Reinforcers

• Step 3: Literature search of NIH RePorter

Outcomes

The Center for Health Economics of Treatment Interventions

for Substance Use Disorder, HCV, and HIV

(CHERISH)

CONFERENCE BRIEF

INCENTIVIZING RECOVERY: PAYMENT, POLICY, AND IMPLEMENTATION OF CONTINGENCY MANAGEMENT

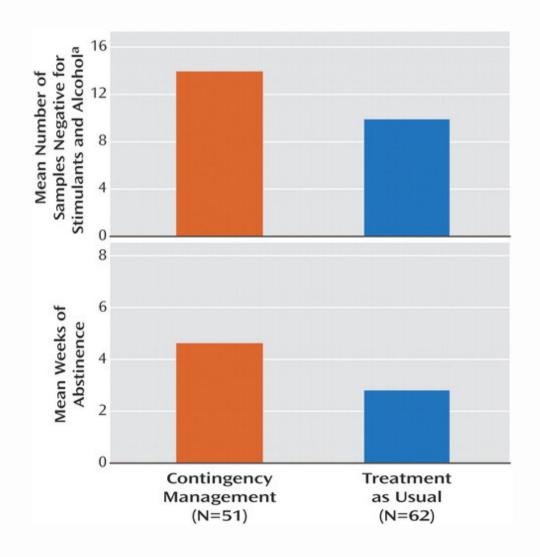
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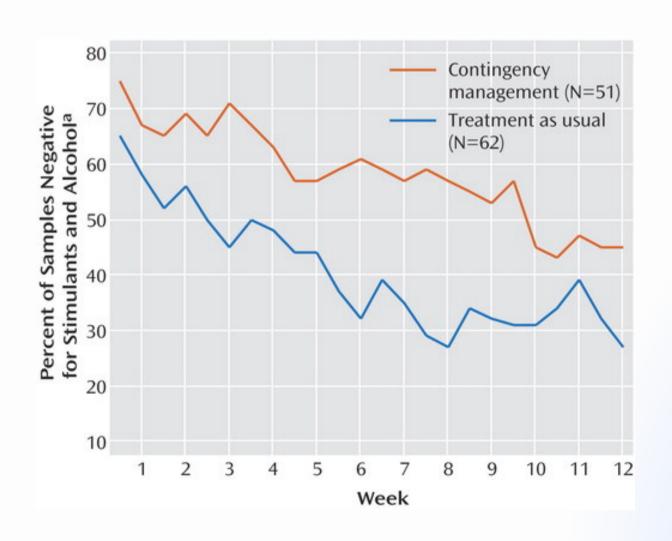
Benicio Beatty

July 2023

Efficacy

• CM has demonstrated efficacy for improving drug abstinence rates during treatment (2,3) and treatment attendance (4) for patients with substance use disorders.





Source: Roll, 2006

Significance

Although there are a number of medications under consideration to treat stimulant use disorder, the evidence is mixed, and there is currently no FDA-approved medication (5). For this reason, understanding and implementing contingency management programs is critical to improving outcomes for stimulant use disorder treatment.

Barriers







Funding



Stigma



Barrier #1: Federal Regulation



The Federal
Anti-Kickback Statute
&
Stark Law



Federal Beneficiary
Inducement
Statute



Civil Monetary
Penalties Law
(CMPL)



Barrier #1: Federal Regulation

A 2020 ruling from the Officer of the Inspector General (OIG) ensures that CM is not prohibited. The ruling permits CM if providers use appropriate safeguards and are not engaging in criminal fraud and abuse practices (6).



Barrier #2: Funding



\$15/\$75 annual cap



Barrier #2: Funding

For programs including contingency management as a component of the treatment program, each individual contingency must be \$15 or less in value and clients may not receive contingencies totaling more than \$75 per budget period (7)



Tracking matrix of NIH funded Contingency Management studies

Project Project End Target											
Project Title	Project Leader	Other PIs	Program Official	Project Number			Target Substance	Measurement	Link	Notes	
Dual reinforcement contingency management for alcohol use disorders	Sheila Alessi, salessi@uchc.edu			5P50AA027055	6/6/19	5/31/24	Alcohol	Attendance/ Adherence	RePORT > RePORTER (nih.gov)	Part of study in A3	
Etiology and Treatment of Alcohol Dependence, Research Project #2	Lance O. Bauer, Ibauer@uchc.edu		Mariela Shirley, shirleym@mail.nih.gov	5P50AA027055	6/6/19	5/31/24	Alcohol	Attendance/ Adherence	RePORT > RePORTER (nih.gov)	Study in A2 is part of this project	
C-DIAS RP 2: Implementing contingency management for stimulant use in specialty addiction treatment organizations	Sara J. Becker, sara_becker@brown.edu			5P50DA054072	8/1/22	5/31/27	Stimulant	Implementation	RePORT > RePORTER (nih.gov)	Examines effectiveness of implementation strategies at OTPs (concurrent stimulant and opioid use)	
Implementing contingency management in opioid treatment centers across New England: A hybrid type 3 trial	Sara J. Becker, sara_becker@brown.edu	Bryan R. Garner	Sarah Q. Duffy, duffys@nida.nih.gov	7R01DA046941	8/1/22	7/31/24	Opioid	Implementation	RePORT > RePORTER (nih.gov)	Primary aim is implementation outcomes, secondary aim is patient outcomes	
Reward-based technology to improve opioid use disorder treatment initiation after an ED visit	Edwin D. Boudreaux, edwin.boudreax@umassme d.edu		Boris Yevgenyevich Sabirzhanov, boris.sabirzhanov@nih.gov	5R42DA049448	9/30/19	5/31/24	Opioid	Abstinence/ Adherence	RePORT > RePORTER (nih.gov)	Measures control vs OARS vs OARS+CM, aims to improve treatment initiation and adherence	
PRIME: PrEP Intervention for people who Inject MEthamphetamine	Phillip O. Coffin, pcoffin@gmail.com		Richard A. Jenkins, jenkinsri@mail.nih.gov	5R01DA051850	8/1/20	6/30/25	PrEP	Adherence	RePORT > RePORTER (nih.gov)	Studies people who inject methamphetamine, measure adherence to PrEP and counseling	
Transporting treatment effects from clinical trials to real-world populations with co-occurring opioid and stimulant use disorders	Ryan Cook, cookry@ohsu.edu		Marcy Esther Fitz-Randolph, marcy.fitz-randolph@nih.gov	5K01DA055130	7/1/22	6/30/26	Opioid + Stimulant	Treatment Initiation/ Adherence	RePORT > RePORTER (nih.gov)	Fuse data from National Drug Abuse Treatment Clinical Trials Network RCTs and National Survey on Drug Use and Health to estimate effectiveness of medictions, CM, motivational interviewing, counseling, and exercise for OUD + StimUD	
USING CONTINGENCY MANAGEMENT TO PROMOTE ADHERENCE TO SMOKING CESSATION TREATMENT AMONG HOSPITALIZED SMOKERS	Erica Nichols Cruvinel, ecruvinel@kumc.edu		Marcy Esther Fitz-Randolph, marcy.fitz-randolph@nih.gov	1K01DA055779	8/1/22	7/31/27	Smoking/ Tobacco	Abstinence/ Adherence	RePORT > RePORTER (nih.gov)		
CPT-SMART for Treatment of PTSD and Cigarette Smoking	Eric A. Dedert, eric.dedert@duke.edu			5I01CX001757	10/1/19	9/30/24	Smoking/ Tobacco	Abstinence	RePORT > RePORTER (nih.gov)	Combination of cognitive processing therapy (CPT) and CM	
Effectiveness and Outcomes of Combined Contingency Management and CBT for Alcohol Use Disorder	Eric A. Dedert, eric.dedert@duke.edu	Patrick S. Calhoun	Laura Elizabeth Kwako, laura.kwako@nih.gov	5R01AA027520	6/1/24	5/31/24	Alcohol	Abstinence	RePORT > RePORTER (nih.gov)	CBT + CM; mobile app-based CM (mCM)	

Barrier #3: Stigma



- Emotion-based criticism
- Political/Ideological criticism
- False perception that CM = Bribery



- Infantilizing view of patient
- General distrust of the patient
- Belief that patient is undeserving of incentive

Source: Fox News, 2023

O Medicaid Programs

Systematic review of state Medicaid 1115 Waiver Demonstrations

State	Date	Provisions/Goals	Eligibility	Reinforcers	Implementation	Additional Notes
California	Summer 2021 (Pilot program launched)	Receive incentives for testing negative for stimulants only, regardless of testing positive for other illicit drugs	"Are enrolled in Medi-Cal and meet access criteria for a comprehensive, individualized course of SUD treatment."	\$599 per patient per year with a total budget of \$57,000,000 from Jan. 2023-2026 (to be finalized)	6 hour didactic training followed by bi-weekly implementation trainings via Zoom. List of provider sites here offering the recovery incentives program HERE	First state-wide CM program outside of VA system
Washington	Fall 2021 (Pilot Program), Waiver submitted 2023	CM connected to SOR contract	Apple Health (Washington state's Medicaid program) beneficiaries to have been "assessed and determined to have a substance use disorder for which the contingency management benefit is medically necessary and appropriate based on the fidelity of treatment to the evidence-based intervention."	\$528 per patient (pilot program)	6 hour didactic training followed by bi-weekly implementation trainings via Zoom. Sites include 5 large hospital systems, 2 federally qualified systems, 9 SUDs treatment centers/behavioral health centers, 3 rural health centers, 4 jails and 1 fire dept.	
Wisconsin	June 2023	Project Goals: 1. train treatment providers at designated sites on the background of CM, the proper implementation of CM, and regulatory requirements and considerations of CM	No eligibility information found. Expected to be consistent with other SAMHSA grant funded programs.	partially funded by SAMHSA grant	training sessions, coaching calls, fidelity monitoring sessions, provision of CM materials adapted to the unique needs of the targeted populations. Full list of provider sites can be found HERE	Still in the early stages of training/information dissemination. In partnership with Washington State University's (WSU) Promoting Research Initiatives in Mental Health and Substance Use (PRISM)
West Virginia	2023-2027 (Pilot program timeline)	TRUST Model: CM integrated into pilot program which also includes other evidence-based treatments (MI, CBT, exersise, community reinforcement)	Medicaid members ages 18 and older who are diagnosed with stimulant use disorder (e.g., methamphetamine, cocaine, similar drugs), based on a completed ASAM criteria assessment	\$75/month per participant up to one year. Incentives will also be in the form of monthly goods and services that must support the individual's health (e.g., gym membership, exercise equipment, food delivery	Implementation thru the TRUST Model. Full list of provider sites can be found here <u>HERE</u>	
Montana	Spring 2021 (Pilot Program)	TRUST Model: CM integrated with other behavioral treatments	Medicaid members ages 18 and older who are diagnosed with stimulant use disorder (e.g., methamphetamine, cocaine, similar drugs), based on a completed ASAM criteria assessment	\$390 per participant per 12-month period	6 hour didactic training followed by bi-weekly implementation trainings via Zoom. Sites include 1 large hospital system, 5 federally qualified systems, 3 SUDs treatment centers/behavioral health centers, 1 rural health centers, and 1 tribal SUD treatment center.	Incentive: small denomination gift cards, pilot program set incentive value at \$315 per patient per year (paid for by a combination of \$75 from SAMHSA and \$240 from statial cohol tax dollars).

Future Research



CM and Harm Reduction

Incentivizing harm reduction strategies in addition to abstinence-based approaches



Incentive Changes

Experimenting with the amount and frequency of payments



MIPG

Increased advocacy and action for CM programs and policies













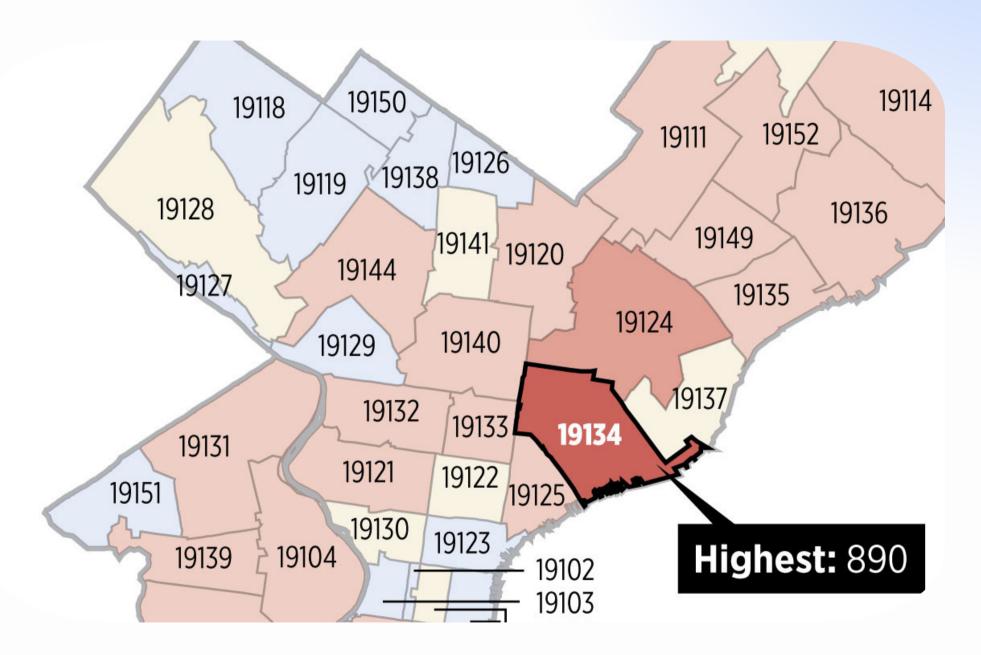
Studying the PhilAdelphia Resilience Project as a Response to Overdose

- Joint project between CECPR and UHL
- PIs: Drs. Gina South and Zack Meisel
- Funding: CDC R01 Grant \$1 Million
- Evaluation of 2 City of Philadelphia programs on impact of overdose outcomes
 - 1 AR-2 Ambulance

2 Blight Remediation

Source: Dolan, 2023









Project Aims

Qualitative transcript coding

Complete micro-costing analysis report based on transcripts

What is Micro-Costing?

mi-cro - cost-ing

noun

The direct enumeration and costing of every input consumed in the treatment of a particular patient (8)

Micro-costing is a method that allows for more precise assessment of the economic costs of a healthcare intervention. Micro-costing attempts to measure costs of a service as accurately as possible (8)

Methods

• Step 1: Material Costs

Examples: Narcan kits, N-95 masks, PPE, gas

• Step 2: Personnel

Examples: paramedic salary, case manager costs

• Step 3: Partners

Examples: Philadelphia Fire Dept., Rock

Ministries, Prevention Point Wound Care Clinic

Urban Health Lab

MICRO-COSTING REPORT

STUDYING THE PHILADELPHIA RESILIENCE PROJECT AS A RESPONS
TO OVERDOSE
(SPARROW)

Benicio Beatty

Research Inter

August 2023

Report Outcomes: In Progress



Partnerships with local agencies are critical for managing costs



Inter-Department
Communication is important
for mitigating burnout and
improving efficiency



New grants have the potential to alleviate costs

Personal Skills Assessment

Skills Learned



Literature Review

Policy Brief

Manuscript



MSHP 0600 Course

Hybrid Working Environment

Research Blogging



Micro-cost Analysis

Qualitative Coding

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References

- 1. Gold M, Siegel J, Russell L, Weinstein M. Cost-effectiveness in health and medicine. New York: Oxford University Press; 1996.
- 2. Benishek LA, Dugosh KL, Kirby KC, Matejkowski J, Clements NT, Seymour BL, et al. Prize-based contingency management for the treatment of substance abusers: a meta-analysis. Addiction. 2014;109(9):1426–36.
- 3. Lussier JP, Heil SH, Mongeon JA, Badger GJ, Higgins ST. A meta-analysis of voucher-based reinforcement therapy for substance use disorders. Addiction. 2006;101(2):192–203.
- 4. Milward J, Lynskey M, Strang J. Solving the problem of non-attendance in substance abuse services. Drug Alcohol Rev. 2014;33(6):625–36.
- 5.FDA [Internet]. 2019 [cited 2023 Jul 7]. Developing Novel Therapies for Stimulant Use Disorder 12/16/2019 12/16/2019. Available from: https://www.fda.gov/news-events/fda-meetings-conferences-and-workshops/developing-novel-therapies-stimulant-use-disorder-12162019-12162019
- 6. Knopf A. CM for stimulant use disorder: No limit imposed by OIG. Alcohol Drug Abuse Wkly. 2021;33(43):6-7.
- 7. Knopf A. SAMHSA keeps \75/\15 CM limits despite methamphetamine epidemic, OIG ruling. Alcohol Drug Abuse Wkly. 2021;33(44):1–3.
- 8. Xu, X., Lazar, C.M. & Ruger, J.P. Micro-costing in health and medicine: a critical appraisal . Health Econ Rev 11, 1 (2021). https://doi.org/10.1186/s13561-020-00298-5
- 9. Bassett, J. (2022, October 20). Riding With Philly AR-2A specialized EMS unit wages war on opioid dependence in one of the nation's hardest-hit battlegrounds. HMP Global Learning Network. Retrieved August 11, 2023, from https://www.hmpgloballearningnetwork.com/site/emsworld/cover-story/riding-philly-ar-2
- 10. Tai, T. (2020, April 9). As the pandemic surges, 'no one deserves what's brewing in Kensington.' Philadelphia Inquirer. Retrieved August 11, 2023, from https://www.inquirer.com/health/coronavirus/kensington-addiction-covid-19-coronavirus-respite-center-20200409.html
- 11. Scott, K., Murphy, C. M., Yap, K., Moul, S., Hurley, L., & Becker, S. J. (2021). Health Professional Stigma as a Barrier to Contingency Management Implementation in Opioid Treatment Programs. Translational issues in psychological science, 7(2), 166–176. https://doi.org/10.1037/tps0000245



Questions?

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