

Contingency Management An Evidence-Based, Cost Effective, Exportable Treatment for Methamphetamine Use

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#### **Disclosures and Conflicts of Interest**

#### Disclosures:

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# Program of Excellence in Addictions Research (PEAR)

#### **Mission Statement:**

- To advance innovative, scientifically rigorous approaches to the understanding, treatment, and prevention of addictions. We accomplish this by:
  - Conducting transdisciplinary research in interrelated areas
  - Training future scholars and clinicians
  - Promoting active participation of program affiliates in relevant policy arenas

#### **Areas of Scholarship:**

- 1. Behavioral Pharmacology
- 2. Health-Related Behavioral Therapies
- 3. Addiction-Related Health Outcomes
- 4. Clinical Epidemiology of Mental Health and Drug/Alcohol Use
- 5. Pharmacotherapy Trials
- 6. Rural Behavioral Health

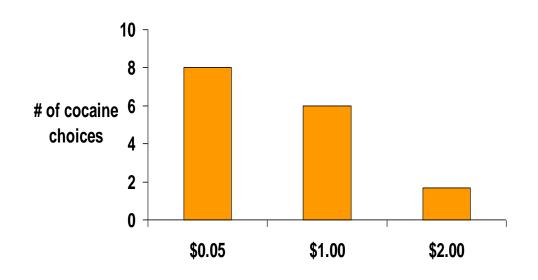




# Contingency Management (CM): What is it?

- Abused drugs function as reinforcers
- Impacts behavior in same way as non-drug reinforcers
- Contingency
   Management (CM)
   provides an
   alternative source
   of reinforcement

(Higgins et al., 1996)





# CM: How is it most commonly implemented?

- Adjunct to treatment in psychosocial treatment settings
- Most common method:
  - Before attending psychosocial counseling, submit urine sample for analysis
  - If <u>negative</u>, several "draws" from bowl for prizes ("Good Job!", small, medium, large jumbo prizes)
  - If positive, reset to baseline
- Watch an example of a CM visit



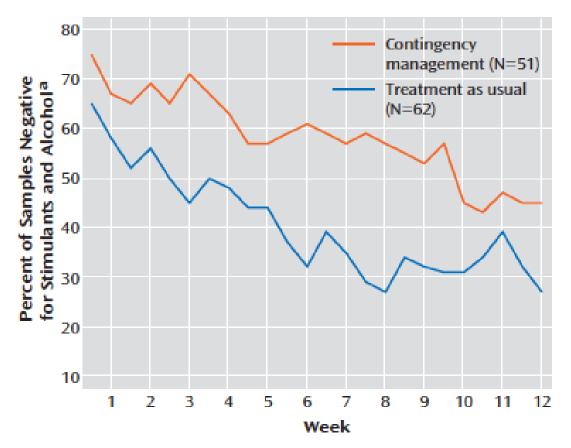
#### **CM:** What is the evidence base?





## CM for methamphetamine use evidence

FIGURE 2. Negative Drug Samples<sup>a</sup> Over 12 Weeks for Patients With Methamphetamine Use Disorders Receiving Usual Treatment With or Without Contingency Management



(Roll, et al., 2006; Roll et al. 2013; Chudzynski et al. 2015)



#### CM: How scalable is it?

- Scalable qualities:
  - Delivered with limited training for staff and clinicians
  - Modifiable schedule depending on clinic need and resources
  - Targets are readily modifiable
  - Variable reward size and type (e.g., donated items)
- Our team currently provides technical assistance for CM across the US, Brazil, and Africa



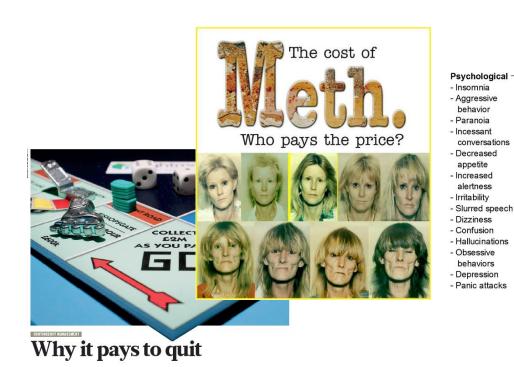


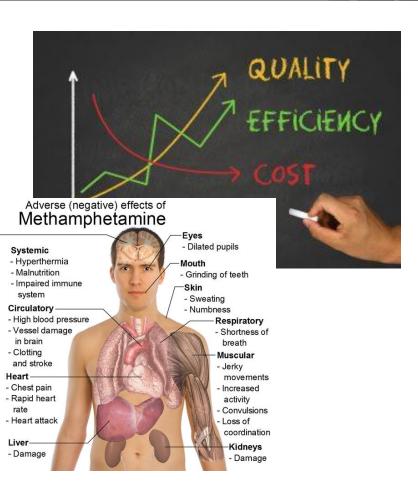


#### CM: Is it cost effective?

#### Yes.

Murphy et al. 2015; Murphy et al. 2016; Kirby et al. 2016; Lopez-Nunes et al. 2016; Rafia et al. 2016







### CM: Example of major implementation

 Veteran's Administration as a Case Example



The national implementation of Contingency Management (CM) in the Department of Veterans Affairs: Attendance at CM sessions and substance use outcomes



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### CM: Example of major implementation

#### ABSTRACT

Background: In 2011, the Department of Veterans Affairs launched an initiative to expand patients' access to contingency management (CM) for the treatment of substance use disorders, particularly stimulant use disorder. This study evaluates the uptake and effectiveness of the VA initiative by presenting data on participation in coaching, fidelity to key components of the CM protocol, and clinical outcomes (CM attendance and substance use).

Methods: Fifty-five months after the first VA stations began offering CM to patients in June 2011, 94 stations had made CM available to 2060 patients. As those 94 VA stations began delivering CM to Veterans, their staff participated in coaching calls to maintain fidelity to CM procedures. As a part of the CM coaching process, those 94 implementation sites provided data describing the setting and structure of their CM programs as well as their fidelity practices. Additional data on patients' CM attendance and urine test results also were collected from the 94 implementation sites.

Results: The mean number of coaching calls the 94 programs participated in was 6.5. The majority of sites implemented CM according to recommended standard guidelines and reported high fidelity with most CM practices. On average, patients attended more than half their scheduled CM sessions, and the average percent of samples that tested negative for the target substance was 91.1%.

Conclusion: The VA's CM implementation initiative has resulted in widespread uptake of CM and produced attendance and substance use outcomes comparable to those found in controlled clinical trials.



### CM: How do we implement it?

THE AMERICAN JOURNAL OF DRUG AND ALCOHOL ABUSE 2016, VOL. 42, NO. 3, 250-253 http://dx.doi.org/10.3109/00952990.2016.1139585



Journal of Substance Abuse Treatment 26 (2004) 305-312

#### Regular article

A survey of clinical practices and readiness to adopt evidence-based practices: Dissemination research in an addiction treatment system

Mark P. McGovern, Ph.D. a,\*, Thomas S. Fox, M.D. a,b, Haiyi Xie, Ph.D.c, Robert E. Drake, M.D., Ph.D.a,c

Contingency management works, clients like it, and it is cost-effective

Kimberly C. Kirby, PhD, BCBA-Da, Lois A. Benishek, PhDb, and Mary B. Tabii Hartzker Substance Abuse Treatment, Prevention, and Policy (2015) 10:

Department of Psychology, Rowan University, Glassboro, NJ, USA; Treatment Research Institute Psychiatry, School of Medicine, University of Pennsylvania, Philadelphia, PA, USA



Treat

COMMENTARY

Contents lists available at SciVerse ScienceDirect

#### Drug and Alcohol Dependence

journal homepage: www.elsevier.com/locate/drugalcdep

Building a bonfire that remains stoked: sustainment of a contingency management intervention developed through collaborative

Interest and preferences for contingency management design among addiction

Identifying provider beliefs related to contingency management adoption using design the contingency management beliefs questionnaire

Carla J. Rash<sup>a,\*</sup>, Nancy M. Petry<sup>a</sup>, Kimberly C. Kirby<sup>b</sup>, Steve Martino<sup>c</sup>, John Bolld Maying J. Stitzane THE AMERICAN JOURNAL OF DRUG AND ALCOHOL ABUSE

Brvan Hartzler

2016, VOL. 42, NO. 3, 287-295

http://dx.doi.org/10.3109/00952990.2015.1096365



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Drug and Alcohol Dependence 85 (2006) 19-27

DRUG an ALCOHOL

**DEPENDE** ORIGINAL ARTICLE

Substance abuse treatment providers' beliefs and objections regarding

contingency management: Implications for dissemination

Journal of Substance Abuse Treatment 42 (2012) 356-365

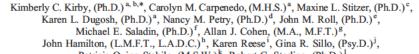
Kimberly C. Kirby a.\*, Lois A. Benishek a.\*, Karen Leggett Dugosh a. MaryLouise E. Kerwin Bryan Hartzler, PhD and Sharon Garrett, MA, MPH

treatment clientele

Regular article

Is exposure to an effective contingency management intervention associated with more positive provider beliefs?







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### CM: How do we implement it?

### The Dissemination and Implementation of Contingency Management for Substance Use Disorders: A Systematic Review

Contingency management is one of the most effective behavioral interventions for substance use. However, the implementation of contingency management has not been as widespread as might be expected given its efficacy. This review summarizes literature that examines the dissemination and implementation of contingency management for substance use in community (e.g., specialized substance use treatment) and clinical (e.g., primary care) settings. A systematic review was conducted according to the Preferred Reporting Items for Systematic Reviews and Meta Analyses (PRISMA) statement. Databases including Google Scholar, World of Knowledge, PsycINFO and PubMed were searched. Search results yielded 100 articles and after the screening of titles and abstracts 44 were identified. Full-text articles were examined for eligibility and yielded 24 articles that were included in this review. Of the 24 articles included in the review, the majority (n=11) focused on implementing contingency management in methadone clinics and opioid treatment programs. Training methods, implementation strategies, fidelity assessments, and attitudes towards the implementation of contingency management are discussed in greater detail. These findings highlight the importance of organizational input and ongoing supervision and consultation and that there is a need for additional research that is guided by theoretical frameworks and use rigorous study designs.

(Oluwoye et al., in press)



# What can we do about methamphetamine abuse?

- 100% preventable problem
- But, in lieu of being able to do that...
- Fund a state-wide program to begin implementing CM for methamphetamine use in as many clinical facilities as possible.









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