CONTINGENCY MANAGEMENT

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November 28, 2023

Disclosures:

- Funding from:
  - National Institutes of Health
  - Robert Wood Johnson Foundation
  - Substance Abuse and Mental Health Administration
  - City of Hartford
  - Wondr Nation
- Consulting relationships with:
  - Science 2 Practice (current)
  - RealWorks (past)
  - Affect Therapies (past)

Overview

- Goals for today:
  - Get your feet wet
  - Start making decisions

Overview

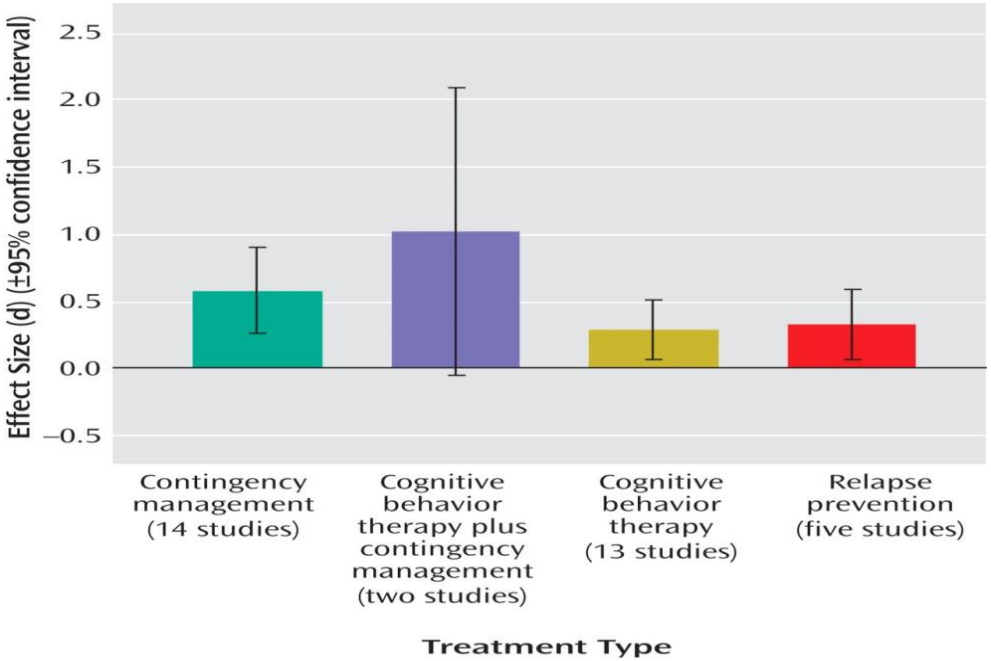
- CM foundations
- Types of CM delivery systems
- Moving toward dissemination/implementation
  - The VA experience (IOP)
  - California
  - Project Mimic (OUD)
- Design and implementation considerations
- Clinical issues

Foundations

- 1980’s cocaine epidemic
- Can we make abstinence more attractive than drug use?
- Positive > Negative consequences
- Behavioral principles - reinforcement

CM works!

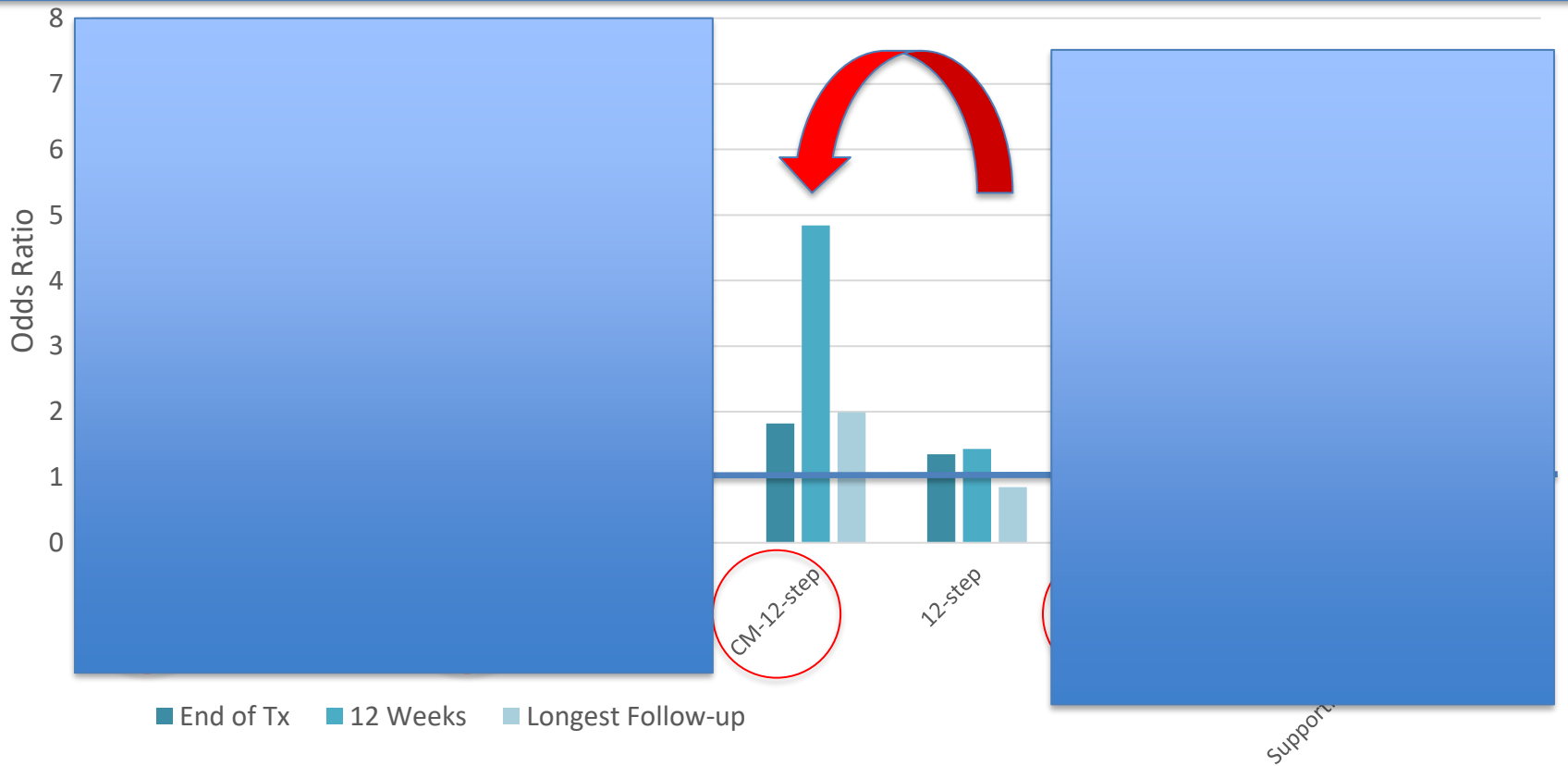
Meta-Analysis of Psychosocial Interventions for SUD



Dutra et al., 2008

More Comparisons

De Crescenzo et al., 2018



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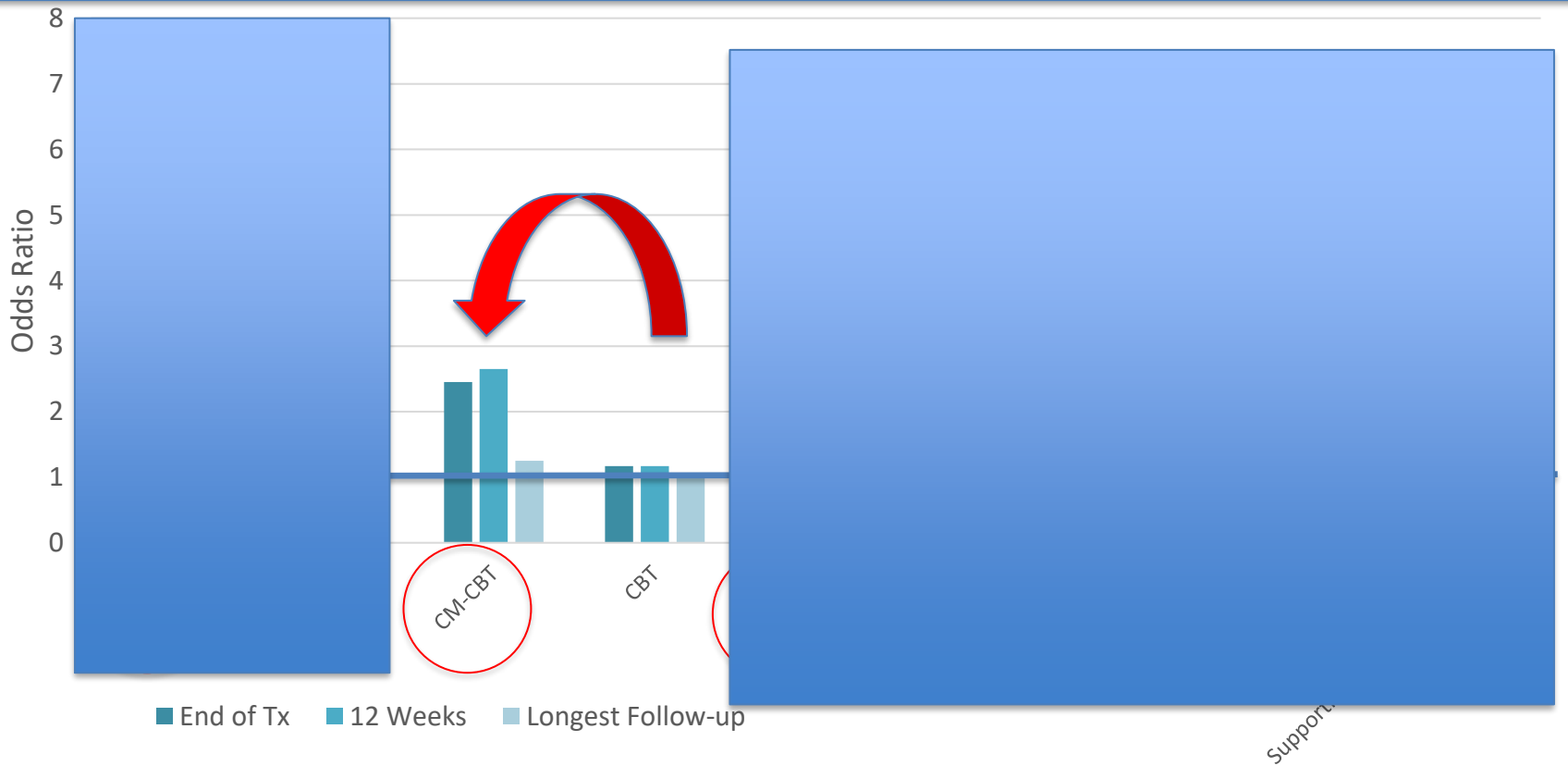

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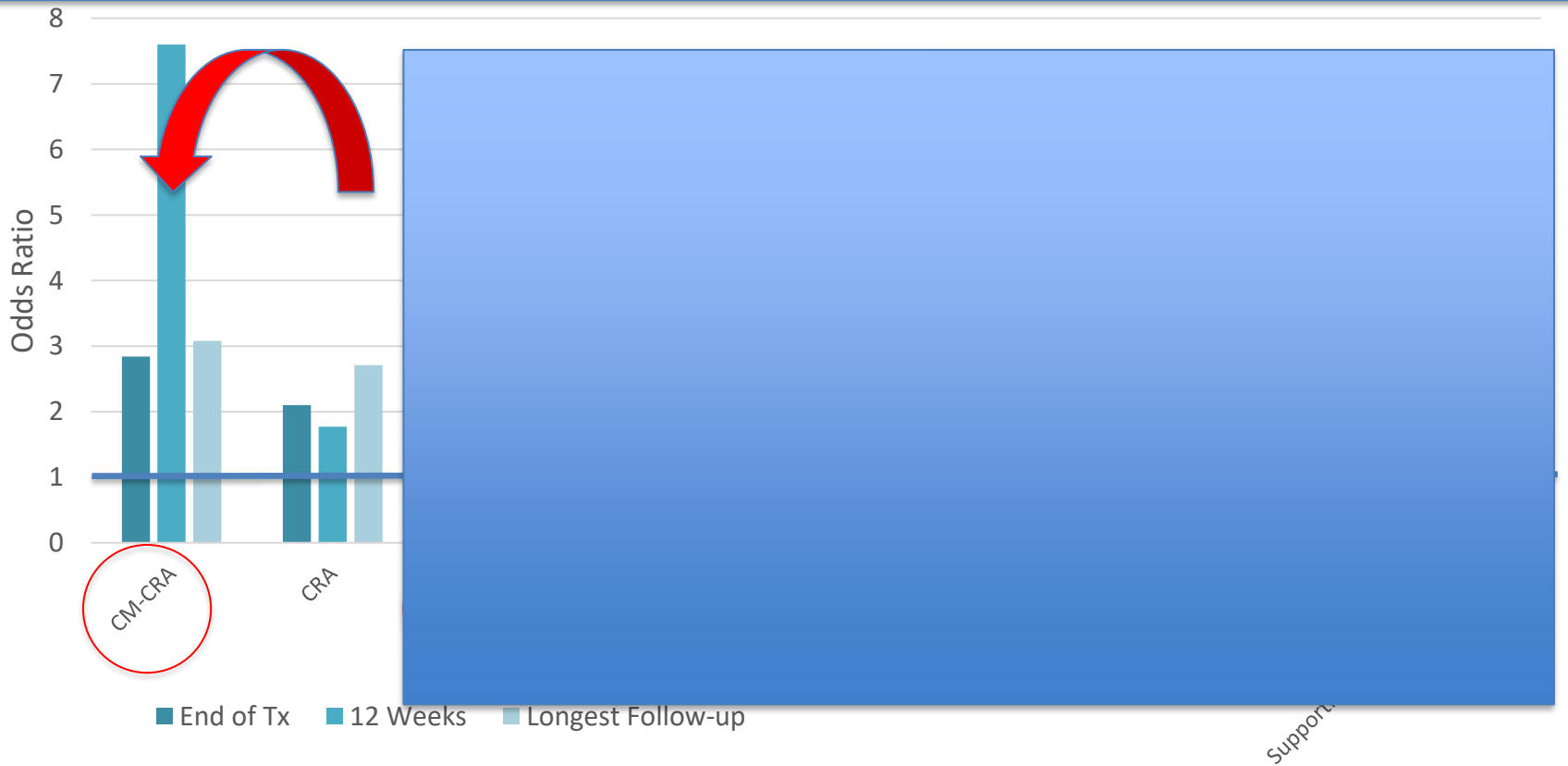

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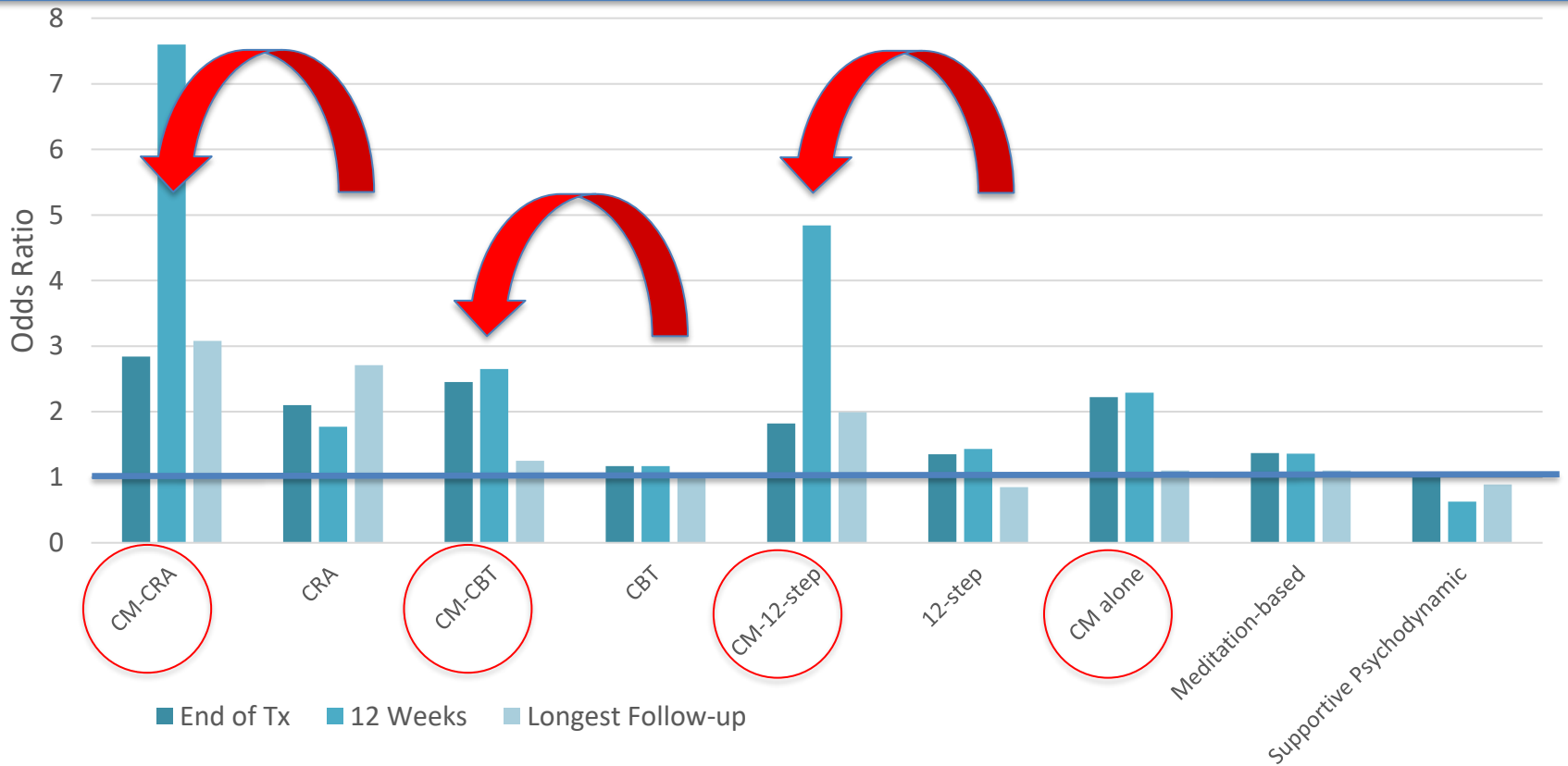
De Crescenzo et al., 2018



Everyday applications

Positive reinforcers increase the probability of behaviors.

- With employees

  Salaries, commission, awards, praise

- With children

  Special foods, allowances

- With pets

  Treats

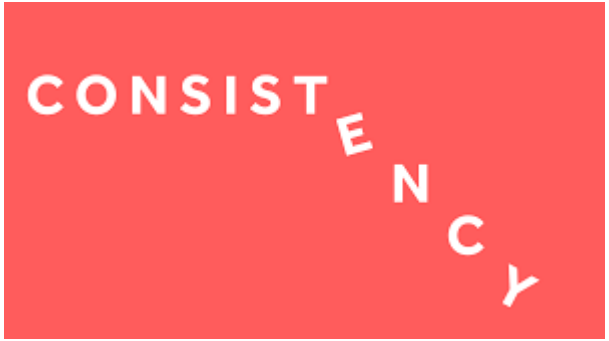
E.J. Pettinger's

Mild Abandon

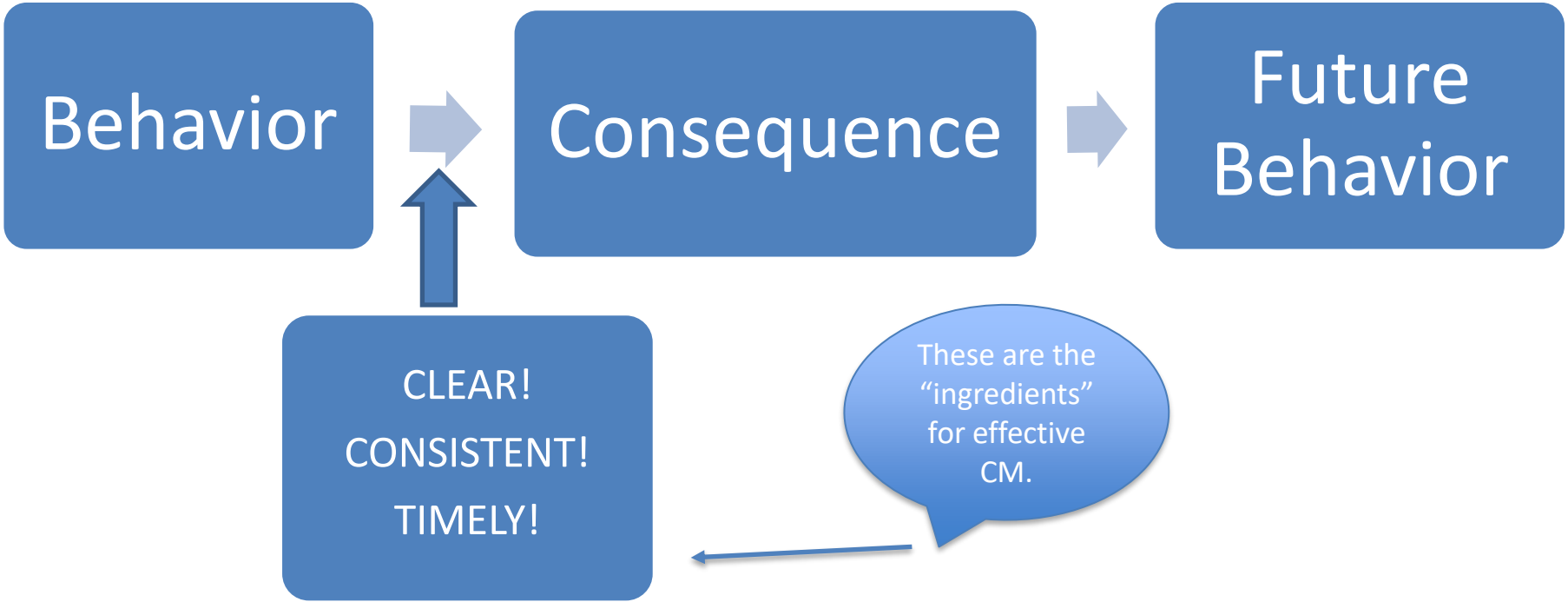
"Listen up kids! I've got two Tootsie Roll Pops here. If you guys behave while we're in the store and do good in high school you can each have one."

Why often ineffective?

- Behaviors not specific
- Not timely
- Bar is too high
- Consequences not consistent
- Not tangible



Making the Sequence Effective



Contingency Management Principles

1. Frequently monitor a specific objectively verifiable target behavior.
2. Provide tangible positive reinforcement each time the target behavior occurs.
3. Withhold reinforcement if the target behavior does not occur.
4. (*) Use escalation and resets to promote consistent behavior.

Voucher CM

- Standard Treatment + CM
  - Community Reinforcement Approach Therapy (CRA)
  - Urine testing 3x/wk in weeks 1-12; 2x/wk in weeks 13-24
  - Vouchers

Standard Treatment

- Same (CRA)
- Same (Urine testing)
- No vouchers

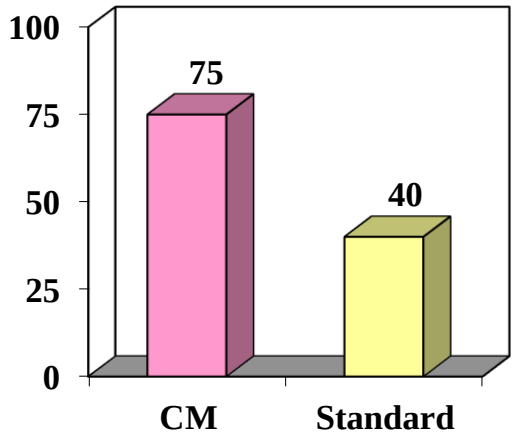
Higgins et al., 1994. Archives of Gen Psychiatry

Voucher CM

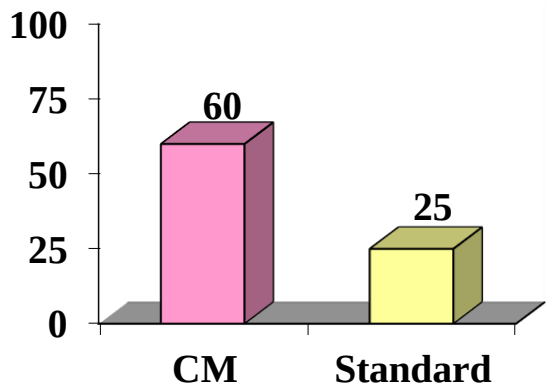
Week	Visit	Voucher	Week	Visit	Voucher
1	1	$2.50	7	1	$25
	2	$3.75		2	$26.25
	3	$5 + $10		3	$27.50 + $10
2	1	$6.25	8	1	$28.75
	2	$7.50		2	$30
	3	$8.75 + $10		3	$31.25 + $10
3	1	$10	9	1	$32.50
	2	$11.25		2	$33.75
	3	$12.50 + 10		3	$35 + $10
4	1	$13.75	10	1	$36.25
	2	$15		2	$37.50
	3	$16.25 +$10		3	$38.75 + $10
5	1	$17.50	11	1	$40
	2	$18.75		2	$41.25
	3	$20 +$10		3	$42.50 + $10
6	1	$21.25	12	1	$43.75
	2	$22.50		2	$45
	3	$23.75 + $10		3	$46.25 + $10
		$296.25			$701.25
			Total		$997.50

Voucher CM Outcomes

Retained throughout trial

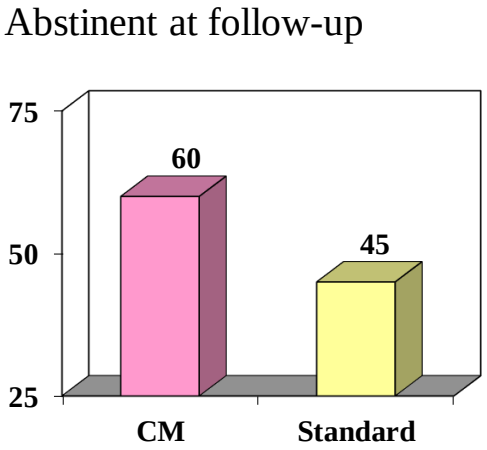


>8 Weeks of cocaine abstinence



Higgins et al., 1994. Archives of Gen Psychiatry

Voucher CM – One year later



Longest duration of abstinence during treatment predicts long-term abstinence.

Higgins et al., 2000. ECP

More on Durability of CM

AMERICAN PSYCHOLOGICAL ASSOCIATION

Journal of Consulting and Clinical Psychology

ISSN: 0022-006X

2021, Vol. 89, No. 1, 58–71
https://doi.org/10.1037/ccp0000552

Long-Term Efficacy of Contingency Management Treatment Based on Objective Indicators of Abstinence From Illicit Substance Use up to 1 Year Following Treatment: A Meta-Analysis

Meredith K. Ginley[1, 2], Rory A. Pfund[3], Carla J. Rash[1], and Kristyn Zajac[1]
[1] Calhoun Cardiology Center-Behavioral Health, University of Connecticut School of Medicine
[2] Department of Psychology, East Tennessee State University
[3] Department of Psychiatry and Human Behavior, The University of Mississippi Medical Center

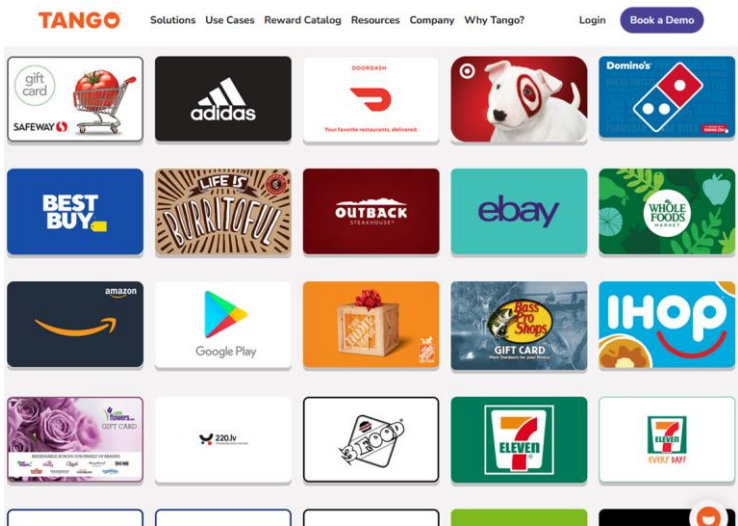
CM works,
but can it be less costly?

Prize-based CM

- Nancy Petry
- AKA “Fish-bowl” CM
- Introduces
  - Probability in earnings
  - Variability in magnitude

Prize bowl

- 500 slips total
  - 250 – good jobs!
  - 209 – smalls ($1)
  - 40 – larges ($20)
  - 1 – jumbo ($100)



Week	Visit	Draws	Week	Visit	Draws
1	1	1	7	1	8
	2	2		2	8
2	1	3	8	1	8
	2	4		2	8
3	1	5	9	1	8
	2	6		2	8
4	1	7	10	1	8
	2	8		2	8
5	1	8	11	1	8
	2	8		2	8
6	1	8	12	1	8
	2	8		2	8

Prize CM - Study Conditions

Standard Tx Group

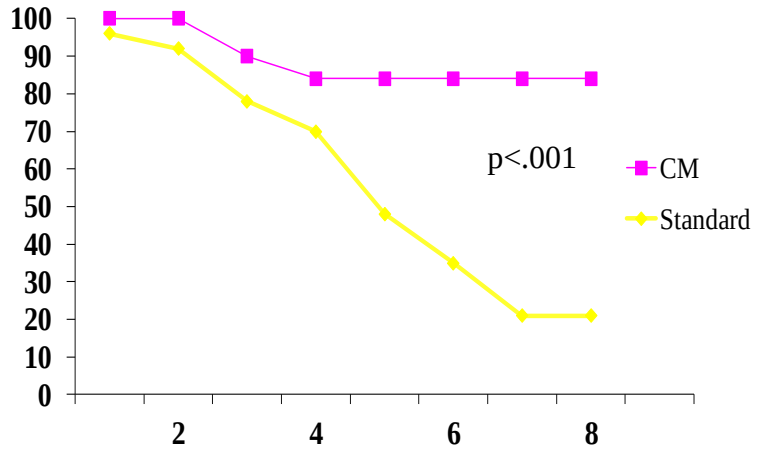
- UC Clinic services
- BrAC monitoring (daily then weekly)
- Additional 15 minutes education on alcohol abuse weekly

Standard + CM Group

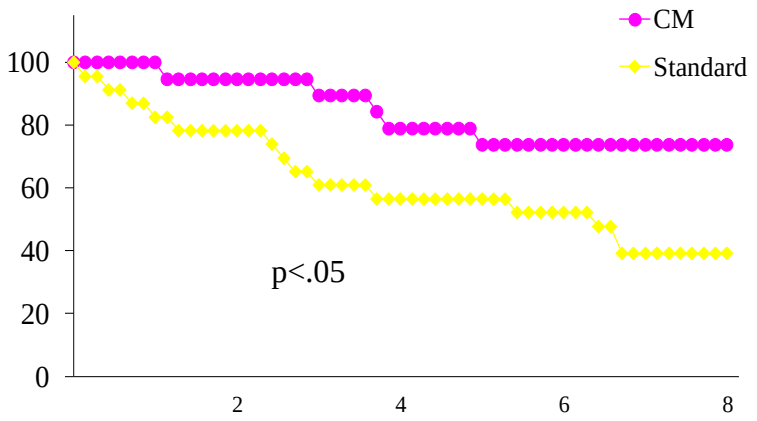
- Same clinic services
- Same BrAC monitoring
- No education
- Draws for negative BrACs
  ~$240 ave max expected

Prize CM - Results

Retention



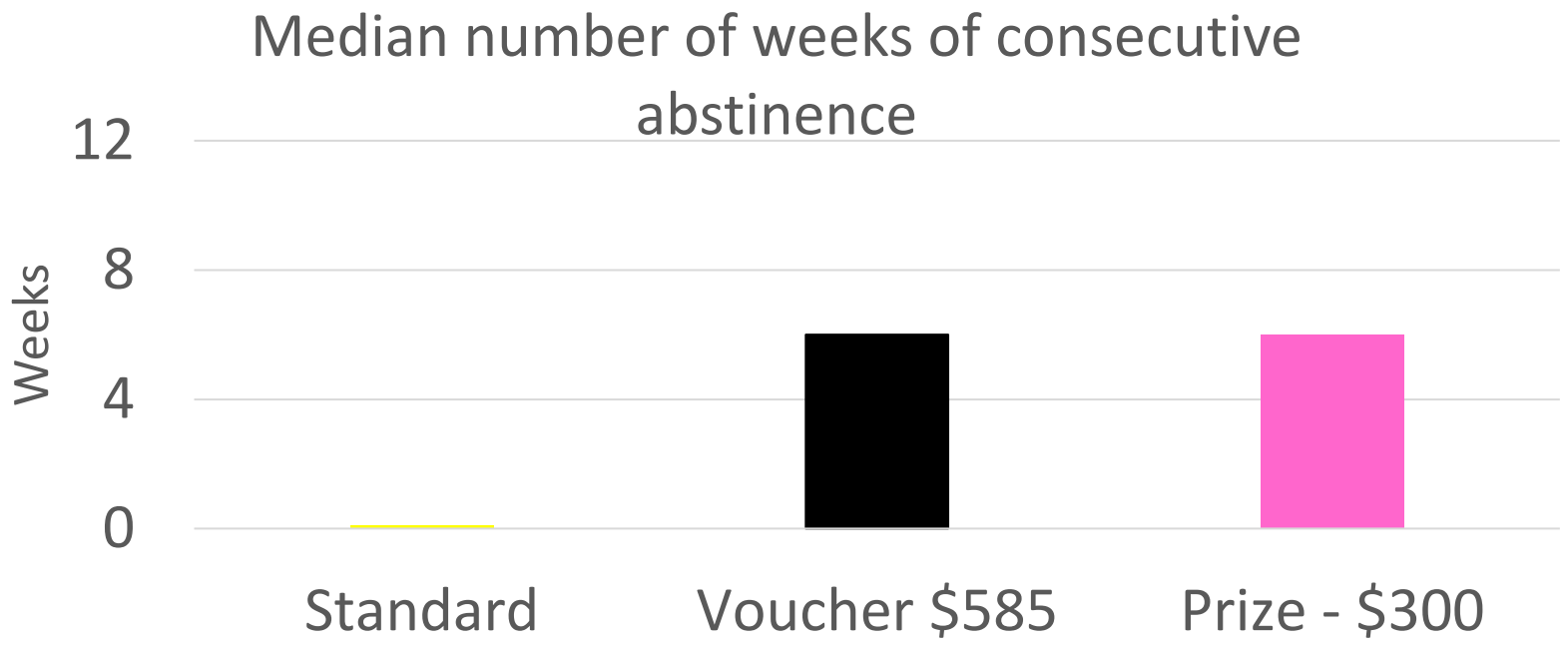
Time until 1st heavy drinking episode



Petry et al., 2000. JCCP

How do prizes compare to vouchers?

Prize vs. Vouchers - MM



Petry et al., 2007. JCCP

Comparison/Summary

Voucher CM

Prize CM

BOTH:

- Efficacious, across many substances
- Magnitude matters
- Accommodates preferences

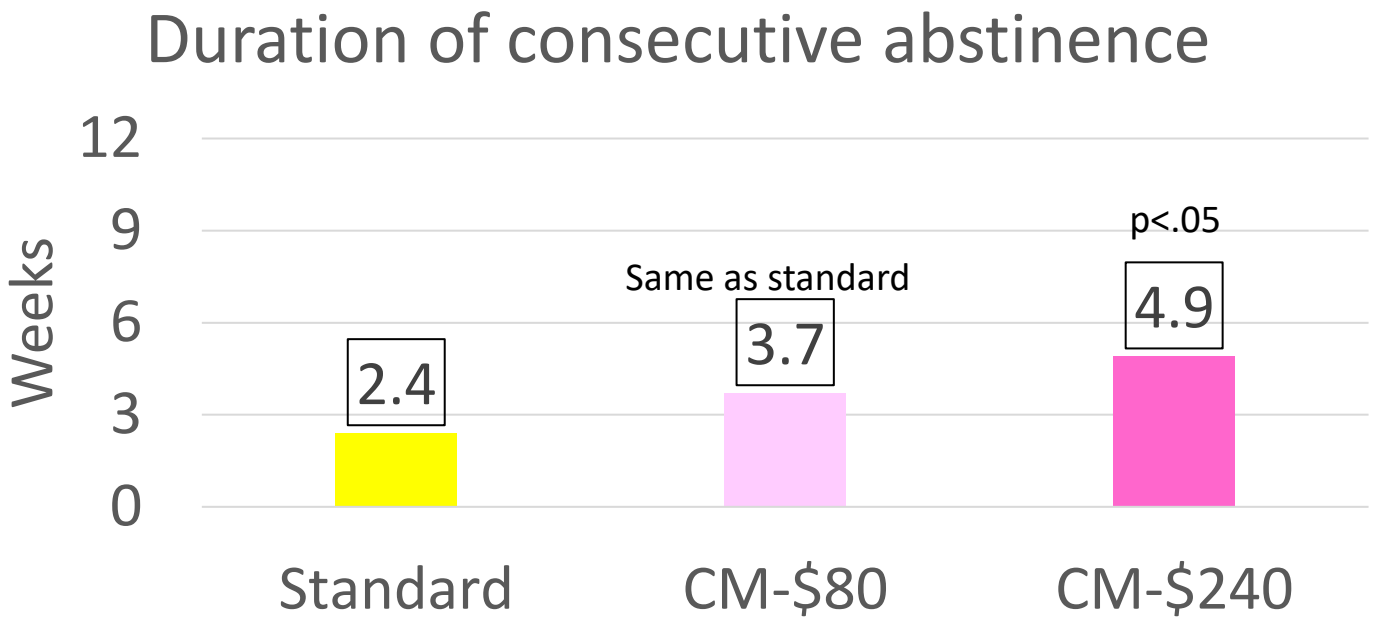
- Predictable
- May be preferred by naïve patients

- Chance and Variability
- Typically lower cost
- Excitement

Take-away #1

The Magnitude = Efficacy Principle
(aka effective “dose”)

How low can we go?



Petry et al. 2004. Addiction

SAMHSA's $75/$15 Rule

- ABSOLUTELY NOT compatible with evidence-based protocol on its own
- Ethics of offering an ineffective treatment

- Must supplement up to an effective range
  - Reference effective protocols:
    - RCTs not demonstration projects, small pilots, historical comparisons, etc.
    - VA Schedule (see Rash & DePhilippis, 2019; Rash et al., 2013; DePhilippis et al., 2018; Petry et al., 2014)

- My suggestions:
  - Prize: $385 to $533 (see Rash, 2023)
  - Voucher: $750 to $1500

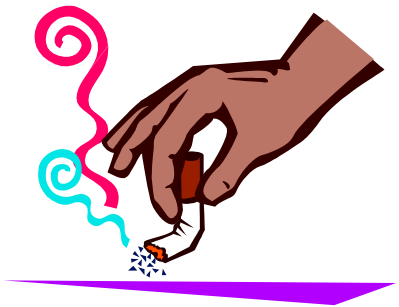
Extensions to many substances

Most common:

- Cocaine
- Methamphetamine
- Opioids

Others:

- Benzodiazepines
- *Marijuana
- *Nicotine
- *Alcohol



Take-Away #2:
Simplicity is Best

Table 6

Comparison of meta-analysis estimates of effect sizes for abstinence outcomes in single drug target CM versus multiple drug target CM protocols.

Meta-analysis	Effect size (*d*) for single drug target CM	Effect size (*d*) for multi-drug target CM
Griffith 2000	Single drug = 1.32	Polydrug = 0.45
Lussier 2006	Cocaine Only = 0.75 Opiates Only = 0.85	Dual Cocaine & Opiate = 0.43 Polydrug = 0.41
Prendergast 2006	Cocaine Only = 0.66 Opiates Only = 0.65	Polydrug = 0.42
Ainscough 2017	Cocaine = 0.75	Dual Cocaine & Opiates = 0.48 Polydrug = 0.62
Bolivar 2021	Stimulants = 0.70	Polydrug = 0.46

Rash, 2023

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Rash, 2023

Target behaviors

Most common and most robust evidence:

- Abstinence

Otherwise:

- Attendance

- How to select abstinence versus attendance?
  - Focus on the top of the hierarchy
  - Abstinence > attendance
  - Should I target both abstinence and attendance?

It works for most clients!

- Demographic characteristics
  - Gender
  - Race
  - Income
  - Housing status
- Clinical characteristics
  - Co-occurring alcohol/substance use or comorbid AUD/SUD disorders
  - Psychiatric severity/disorders
  - Medical comorbidities
  - Prior history of SUD treatment

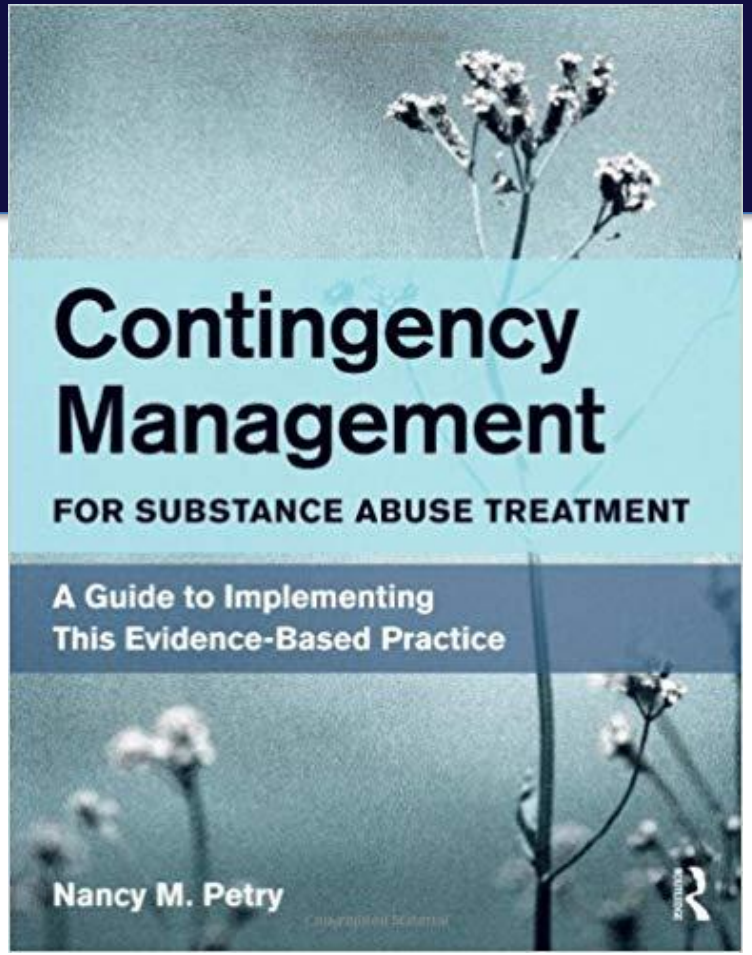
  - ****Active use at admission

CM is efficacious and generalizes.

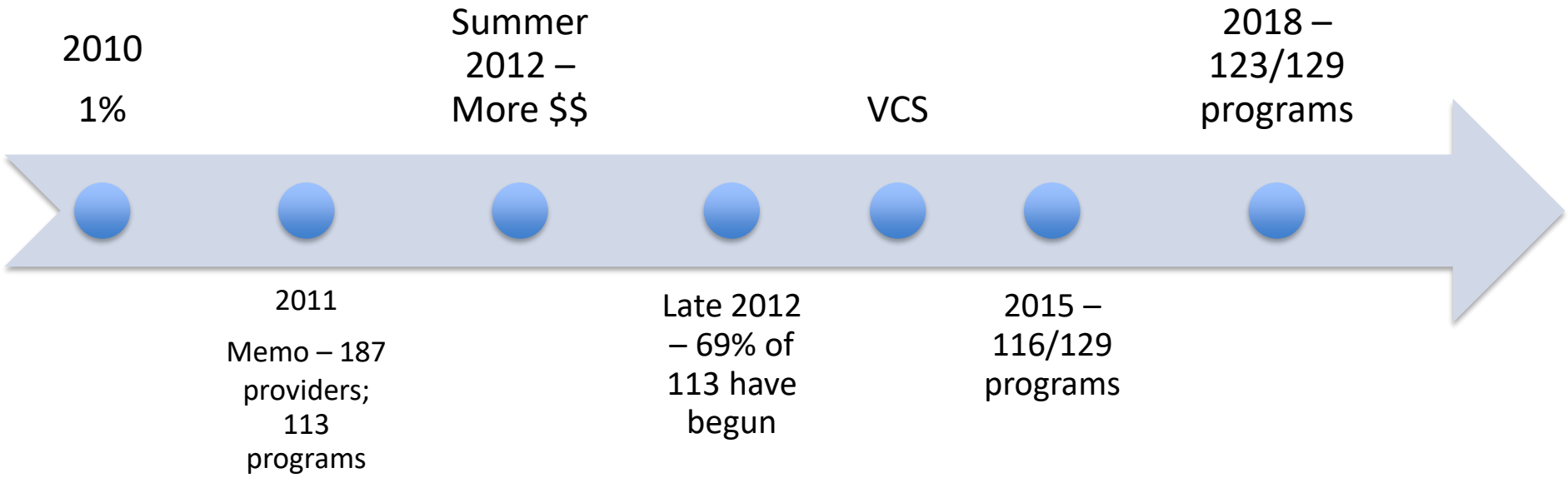
Is it being used clinically?

The VA Effort

- 2008 recognized CM as an EBT
- 2011-present
- Provides a model for successful implementation in clinical settings



The VA implementation effort



Dephillipis et al., 2018. DAD; Petry et al., 2014. Am J Addictions; Rash et al., 2013. JSAT; Rash & DePhilippis, in press

VA Experience

- Focused on patients with Stimulant Use Disorders
  - 56% cocaine only, 39% all stimulants
- Most programs chose abstinence-based CM (81%)
- Expert involvement
- Pre- and Post-implementation coaching support
- High fidelity to recommended CM practices
  - 75% used our recommended Prize CM protocol, 164 draws possible; standard fishbowl, and ~$365/patient average max cost
  - 84% 12-weeks duration
  - 90% Twice-weekly rapid urine testing

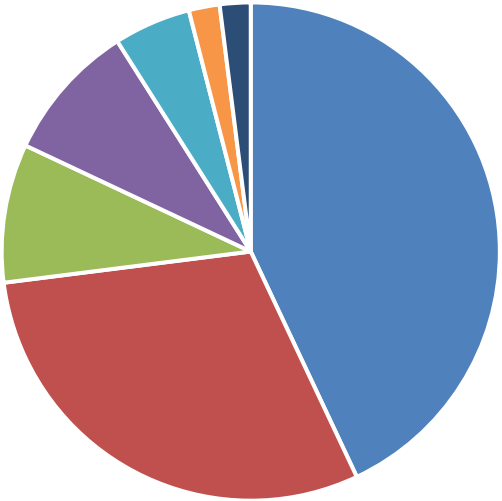
DePhilippis et al., 2018; Rash & DePhilippis, 2019

Next Major Step: Regulatory Change

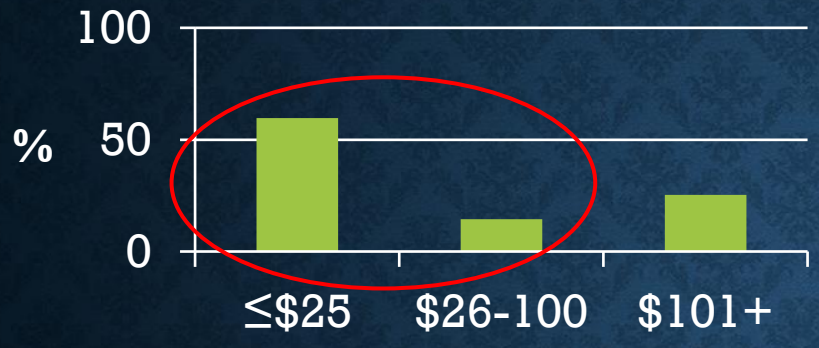
~$58 million!
-Stimulants, Abstinence-based
-In-person sessions
-Twice-weekly
-Voucher CM, gift card focused
Initial Phase (wks 1-12): $438
Maintenance (wks 13-24): $161

But what happens elsewhere?

Typical magnitude per client

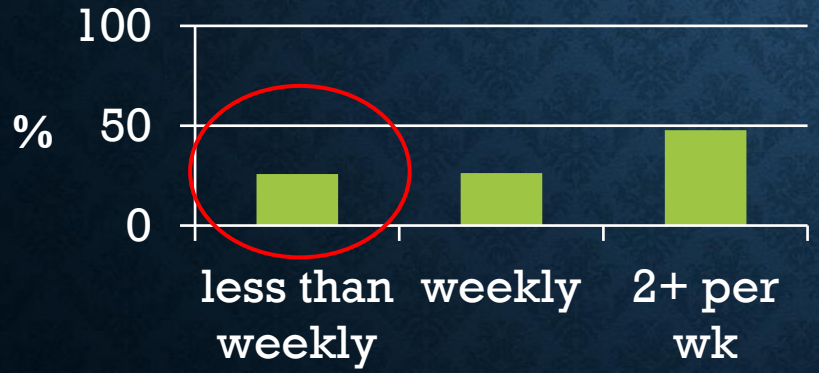


Rash et al. 2012

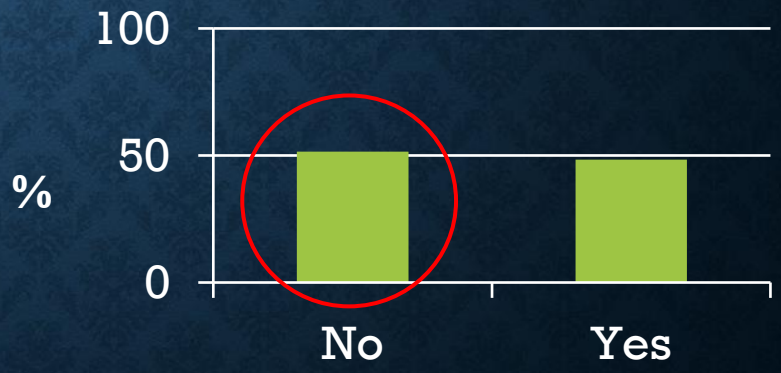


Magnitude of Reinforceme

Immediacy of…



Frequency of Reinforceme



Use of Escalating Schedu

Rash et al., 2020

Designing a CM protocol

1) Selecting a behavior
2) Selecting reinforcers
3) Integrating behavioral principles

1) Selecting a target behavior

- Pick a behavior to target for the CM protocol:
  - Must be a therapeutic behavior
  - Should be a deficit area (e.g., CM will not improve attendance if attendance is already high)

- **MUST MUST MUST** be objectively verified
- Self-report is absolutely **NOT** an option

Target: Abstinence

- Screen samples frequently enough to detect all use of the target drug and so that abstinence is reinforced frequently.

- Stimulants and opioids – most tests detect use in past 2-3 days
  - Best schedule – 3 times per week (M, W, F)
  - Good, but less ideal – 2 times per week (M, Th) or (M, F) or (T, F)

- Alcohol/nicotine breathalyzers – short detection windows (6-12 hours)
  - Best schedule – multiple times/day

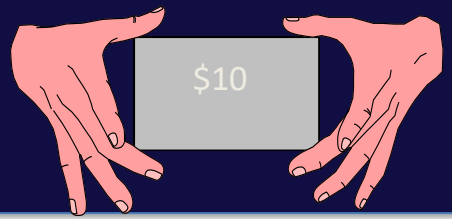
Considerations for targeting abstinence

- Use onsite rapid testing kits. Provide immediate feedback to client.
- Use validity tests. Observed samples, temp, ph, adulterant tests.
  - If you suspect a fake/altered sample, test another sample the same day.
  - Observed samples – Reserve the right from the start and use when needed.
  - Outline the ‘rules’ from the start.
- More impactful on patient outcomes to reinforce a single drug rather than multiple.
  - High bar means fewer clients will be exposed to reinforcers. If clients don’t experience reinforcement, the behavior won’t change.

Targeting attendance

- Frequency – aim for twice weekly, but no less than weekly
- Troubleshooting
  - Ground Rules: How will you handle lateness? leave group early?
  - Workflow considerations: When will you deliver the incentives (before group/after group)? More than one therapist on hand?
- Communicate clear expectations/guidelines to clients
  - What groups/sessions count or don't count?
  - What if there is a valid reason for missing group (i.e., court date)?
  - What will you require in terms of verification (documentation)?
  - What happens when client misses a session?
  - What happens if they call after the fact?
  - What happens if…

2) Selecting reinforcers



- Think about your clinic population. Needs? Wants?
  - Consider age, housing status, local store availability, (lack of) online access
- Desirable selection is critical!
- Variability in selection – another MUST!
  - Enough selection to appeal to all your different clients with differing needs/wants.
  - Enough selection to appeal to the same client who comes to all 24 visits over 12 weeks.
  - “Is there something you are working toward?” “What do you think you might want next time you test negative from stimulants?” “I’m going shopping this week, what would you like to see in the cabinet?”
  - Informally (or formally) survey your clients

Stocking a prize cabinet

- Smalls ($1; at least 50 items spanning 25+ different choices)
  - Toiletries, small make-up items, hair care, nail polish and related items, socks, hand/foot warmers, food items, drinks, candy/gum/mints, instant coffee, creamer, chapstick, tissues, toy items, small kitchen items, key chains/carabiners, gloves/hats.
  - Bus tokens, $1 food coupons
- Larges ($20; at least 15 different items)
  - Gift cards (mix of $5, $10, $20 denominations), small kitchen electronics, small kitchen sets, electric razor, men's shaving kits, hair cutting kits, hair dryer/flat iron/curler, toys, bath sets, tools, floor/window fans, sports balls, headphones/earbuds, bluetooth speakers, alarm clock, umbrella, blankets, watches
- Jumbo ($100; 2-3 different options)
  - $100 in gift cards; air condition, headphones, Bluetooth, tablets

Desirability notes

- Alternate options:
  - All GCs with no stocked prizes (save time/hassle of shopping)
  - Mostly GCs, with small prizes in stocked in house
  - Loadable GCs

- If stocking physical gift cards:
  - Have variability in stores or use a card with wide applications (visa/MC/etc.)
  - Do not purchase large denominations for store cards (e.g., no $100 card). I use $5s, $10s, and $20s and I allow stacking cards from different stores.
  - Do not over-purchase unless you are 100% confident that the store will exist for several years and that clients will desire that store.

3) Behavioral parameters

- Objectively verifiable
- Frequency
- Duration
- Immediacy
- Magnitude
- Escalating
- Consistency

3) Behavioral parameters -Frequency

- Frequent monitoring is important.
  - Space samples appropriately based on testing window of detection.
  - Stims/opis – 2-3x/week

- Frequent reinforcement.
  - Fixed ratio (FR1) is best to establish a new behavior pattern.
  - For abstinence, not less than 2x weekly.
  - For attendance, not less than weekly.

3) Behavioral parameters -Duration

- Consider that we are establishing a new habit or behavior pattern.
- Provide sufficient duration for behavior to stabilize.
- Provide sufficient duration to allow for lapses and returns.
- Ideal 12-24+ weeks; ASPE is recommending at least 12 weeks.

3) Behavioral parameters -Immediacy

- Learning is best when delay is short.
- Minimize time between the behavior and the consequence.

- Use rapid onsite test kits.
- Immediately provide test results to client and reinforce if applicable.

3) Behavioral parameters -Magnitude

- Higher magnitude = larger effects
- True for both voucher and prize CM
- Keep in mind that the reinforcers need to be large enough to compete with the target behavior.
  - Consider what you are offering relative to what you are asking clients to do to earn it.
  - Look for reinforcers of ‘high magnitude’ but not high cost (desirability).
- Variability key! Account for individual differences.

3) Behavioral parameters -Escalation

- Increases in voucher amount or number of draws with each demonstration of the target behavior.
- Resets – following positive sample or unexcused absence, back to start value
- Can introduce caps to control time/costs
- Getting fancy
  - Bonuses – weekly
  - ‘Guaranteed large’
  - Return following reset (after 2 weeks on target behavior)

3) Behavioral parameters -Consistency

- Training – staff turnover? New staff?
- Auditing procedures - prize bowl; prize inventory; tracking
- Clinician skill is related to client outcomes
  - Hartzler et al., 2017; Petry et al., 2012
- Supervision may be critical in maintaining adherence over time
  - Have procedures in place to monitor staff compliance with competent CM delivery
  - Consider ways to reinforce staff competence
- Simple adherence measures are available; Guard against fade over time
  - Hartzler, 2014; Petry et al., 2010

Clinical Considerations & FAQs

Incorporating Technology

- It is possible to do low tech CM.
- However, technology options are available.

- Low-tech: pen and paper
- Semi-tech: Use a CM Tracker or Virtual Prize Bowl, but conduct session in person
- Fully virtual options: Make sure there is connection to the therapist/therapy, excellent option for high frequency behaviors and rural/low in-person contact settings.

Workflow

- CM is quick
  - First session – 10-12 minutes
  - Subsequent sessions – 2-5 minutes
- My preference (abstinence CM) – at the start of the individual clinical session

Flow #1

Arrives
Collect sample
Read sample & reinforce
Select prizes
Clinical Content

Flow #2

Arrives
Collect sample
Read sample & reinforce
Clinical Content
Select prizes

Eligibility Considerations – Be Careful!

- Inclusions (who are you focusing on?)
  - Consider “manufacturability”
  - Generally, I suggest new admissions (higher freq. of contact, high rates of discontinuation, establishing new behaviors)

- Exclusions (who will you exclude from your CM program?)
  - Increased frequency of testing = more likely to detect use. Be sure that this does not negatively impact your clients.
  - Legal Issues/Involvement
  - Prize CM: In recovery for Gambling Disorder?

Will non-reinforced drug use increase?

No CM studies have reported increases in other drug use when abstinence from any one drug is reinforced. If use of the most problematic drug decreases, other drug use is likely to decrease or remain constant.

Usual clinic practices should apply to all CM patients. If a patient arrives intoxicated, standard clinic procedures should be in place, such as calling police or emergency services and not allowing access clinic services (including CM).

Remember that attendance CM does not show the same impact on abstinence behaviors as when targeting abstinence directly.

Prize CM and gambling?

- Although prize CM contains an element of chance, it is not gambling.
- No evidence indicates gambling problems develop with prize CM.
- We have followed thousands of patients in CM projects and assessed gambling before, during and after participating in CM. There have been no cases of pathological gambling developing in any CM-treated patients (Petry et al. 2006. Prize-based contingency management does not increase gambling: Results of the NIDA Clinical Trials Network multi-site study. *Drug & Alcohol Dependence, 83*, 269-273).
- Although no data suggest that prize CM is harmful, patients in recovery from pathological gambling should NOT be included in prize CM programs.

What happens when CM ends?

- Many clinicians express concern that when CM ends, patients will drop out of treatment or relapse. This is not typically what happens. Most patients prepare for the ending of CM, and a strong predictor of long-term abstinence is the longest duration of abstinence achieved during treatment (Higgins et al., 2000; Petry et al., 2005,2007).
- In all CM programs, remind patients of the time duration two weeks prior to their end dates, and openly discuss reactions. Providing certificates of completion on the last day of CM is a nice way to celebrate successful participation in a CM program.

Considering How Client Behavior Affects the Schedule

Clinical Events

Possible Events	Impact on Prize Draw Schedule
On target (negative samples)	Good! CM schedule continues unchanged.
Positive sample (stimulants)	No prize draws, resets draws to start value for next negative sample
Unexcused absence (no show)	No prize draws, resets draws to start value for next negative sample
Excused absence (clinician out sick, known court date)	No prize draws, but does not reset draws (continues where left off)

Week	Visit	Draws	Week	Visit	Draws
1	1	1	7	1	8
	2	2		2	8
2	1	3	8	1	8
	2	4		2	8
3	1	5	9	1	8
	2	6		2	8
4	1	7	10	1	8
	2	8		2	8
5	1	8	11	1	8
	2	8		2	8
6	1	8	12	1	8
	2	8		2	8

VA Schedule: $432 (updated for inflation)

Week	Visit	Prize Draws	Event	Week	Visit	Prize Draws	Event
1	1	1		7	1	1	Reset
	2	2			2	2	
2	1	3		8	1	0	Positive Urine
	2	4			2	1	Reset
3	1	0	No show	9	1	2	
	2	1	Reset		2	3	
4	1	2		10	1	4	
	2	3			2	5	
5	1	4		11	1	6	
	2	5			2	7	
6	1	6		12	1	8	Reaches Cap
	2	0	Positive Urine		2	8	Stays at Cap
						Total Draws: 78	Total $ (est): $206

Performance Impacts Costs

“Perfect” Performance

- Attends all 24 visits
- All samples negative
- Total draws: 164 (max)
- Estimated average expected maximum = $432

With deviations from perfect

- 1 no-show, attended 23 out of 24 visits
- 2 stim positive samples
- Total Draws: 78
- Estimated average expected maximum = $206

Week	Visit	Prize Draws	Event	Week	Visit	Prize Draws	Event
1	1	1		7	1	8	
	2	2			2	8	
2	1	3		8	1	8	
	2	4			2	8	
3	1	5		9	1	0	Excused
	2	0	Excused		2	8	
4	1	6		10	1	8	
	2	7			2	8	
5	1	8	Reaches Cap	11	1	8	
	2	8	Stays at cap		2	8	
6	1	8		12	1	8	
	2	8			2	8	
					Total Draws: 148		
					Estimated Ave Max: $391		

Performance Impacts Costs

“Perfect” Performance

- Attends all 24 visits
- All samples negative
- Total draws: 164 (max)
- Estimated average expected maximum = $432

With deviations from perfect

- 1 no-show, attended 23 out of 24 visits
- 2 stim positive samples
- Total Draws: 78
- Estimated average expected maximum = $206

Good Performance with Excused Absences

- Attends 22 out of 24 visits
- All samples submitted negative
- Total draws: 148
- Estimated average expected maximum = $392

Clinical scenarios

What if the…

- Client tests negative for target drugs (stimulants), but tests positive for other substance use (alcohol, benzos, opioids, MJ)?
- Client tests negative for target drugs (stimulants), but self-reports other substance use (alcohol, benzos, opioids, MJ)?
- Sample tests negative for target drug (stims), but self-reports using the target drug (stims)?
- Client tests negative for target drugs (stims) but is not attending clinical sessions?

Week 1

Date:		
Day of week (circle)	M, T, W, Th, F	M, T, W, Th, F
Circle:	Show Ex Unex	Show Ex Unex
Stimulant Utox Result:	+ -	+ -
# Draws:	_____	_____
Draw Result:		

Week 2

Date:		
Day of week (circle)	M, T, W, Th, F	M, T, W, Th, F
Circle:	Show Ex Unex	Show Ex Unex
Stimulant Utox Result:	+ -	+ -
# Draws:	_____	_____
Draw Result:		

Week 3

Date:		
Day of week (circle)	M, T, W, Th, F	M, T, W, Th, F
Circle:	Show Ex Unex	Show Ex Unex
Stimulant Utox Result:	+ -	+ -
# Draws:	_____	_____
Draw Result:		

Week 4

Date:		
Day of week (circle)	M, T, W, Th, F	M, T, W, Th, F
Circle:	Show Ex Unex	Show Ex Unex
Stimulant Utox Result:	+ -	+ -
# Draws:	_____	_____
Draw Result:		

Week 1

Date:	8/2/23	8/4/23
Day of week (circle)	M, (T), W, Th, F	M, T, W, Th, (F)
Circle:	(Show) Ex Unex	(Show) Ex Unex
Stimulant Utox Result:	+ (-)	+ (-)
# Draws:	1	2
Draw Result:	1g	1g 1sm

Week 2

Date:	8/8/23	8/11/23
Day of week (circle)	M, (T), W, Th, F	M, T, W, Th, (F)
Circle:	(Show) Ex Unex	(Show) Ex Unex
Stimulant Utox Result:	+ (-)	+ (-)
# Draws:	3	4
Draw Result:	2lg, 1g	3sm, 1g

Week 3

Date:	8/15/23	8/18/23
Day of week (circle)	M, (T), W, Th, F	M, T, W, Th, (F)
Circle:	Show Ex (Unex)	(Show) Ex Unex
Stimulant Utox Result:	+ -	+ (-)
# Draws:	Ø	1
Draw Result:	—	1lg

Week 4

Date:	8/22/23	8/25/23
Day of week (circle)	M, (T), W, Th, F	M, T, W, Th, (F)
Circle:	(Show) Ex Unex	(Show) Ex Unex
Stimulant Utox Result:	+ (-)	+ (-)
# Draws:	2	3
Draw Result:	2sm	1g, 1sm, 1lg

Interested in CM?

- CM solves a problem.

- What is the problem that you are trying to solve? And, who is affected?
  - Illicit stimulant use?
  - Retention?
  - Treatment engagement?

- Use your clinical data to inform your decision.

Use Best Practices (Rash, 2023)

Principle	Best Practice for Stim Abstinence CM
Objective, verifiable target behavior	Stimulant abstinence measured by urine tests
# Behaviors	Single drug, single drug class
Duration	12+ weeks
Frequency	2-3x weekly, well spaced
Immediacy	POC tests
Escalation/Resets	Yes
Magnitude	Prize $385-$533, Voucher $750-$1500
Reinforcers	Desirable with large variety

What comes next?

- Create protocol– target behavior, what absences will be excused, how will unexcused absences be handled. Refused sample, unable to provide sample?
- Troubleshoot – sit down together and think of as many situations as possible that could arise (the “what ifs”).
- Prepare a description of the CM program that clinicians can use to explain to clients. Be mindful of eligibility criteria.
- Clinician Manuals for Prize CM: https://health.uconn.edu/contingency-management/training/training-related-links/
- Clinicians Role-play and Rate
  - I do 4 scenarios with my staff (new client, target met, target not met, unexcused absence)
  - At minimum recommended 1 roleplay explaining CM to a new client)
- Be prepared for questions from staff and clients.
- Stock reinforcers; prepare fishbowl if using Prize CM
- Pilot testing with 1-2 patients before launching broadly

CM Competency Scale - Prize

1. To what extent did the therapist **discuss outcomes** of urine and breath sample monitoring?

2. To what extent did the therapist state **how many draws were earned at this session**?

3. To what extent did the therapist state **how many draws would be earned at the next session** if the client were abstinent?

4. To what extent did the therapist **assess the client's desire for items** in the prize cabinet?

CM Competency Scale

5. To what extent did the therapist **discuss the client's self-report** of substance use?

6. If the client self-reported substance use, to what extent did the therapist relate self-report of substance use to objective indicators?

7. If the client self-reported substance use, to what extent did the therapist relate self-report of substance use to consequences of positive samples?

8. To what extent did the therapist **compliment or praise** clients' efforts toward abstinence?

9. To what extent did the therapist **communicate confidence** that clients' efforts will yield success in the future?

Thank you

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https://health.uconn.edu/contingency-management/

What are the barriers to implementing widely and with fidelity?

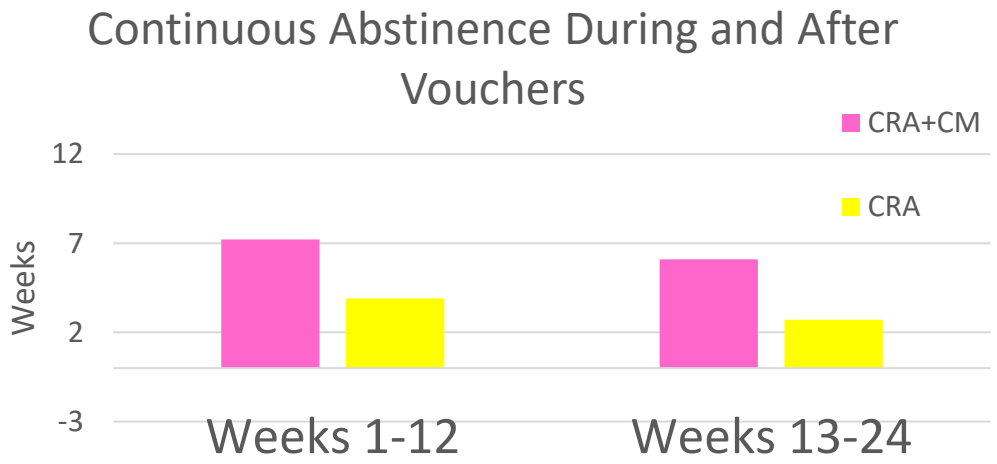
What are providers worried about?

- What happens after contingencies are withdrawn
- Sell/trade items for drugs
- Undermines internal motivation

Rash et al. 2012

Barriers

- Worried about what happens after contingencies are withdrawn



Higgins et al., 1994. Archives of Gen Psychiatry

Barriers

- Worried about what happens after contingencies are withdrawn
- Sell/trade items for drugs
  - Abstinence CM is self-correcting when well designed
  - Attendance CM is not
- Undermines internal motivation

Barriers

- Worried about what happens after contingencies are withdrawn
- Sell/trade items for drugs
- Undermines internal motivation
  - External reinforcers promote behavior change and engagement in treatment. Sobriety may become reinforcing itself over time.
  - Clinically, we see patients motivated by prizes in the beginning, and as they become engaged in their recovery, the prizes are less salient.
  - CM does not adversely impact motivation to change (Ledgerwood & Petry, 2006. Does contingency management affect motivation to change substance use? *Drug & Alcohol Dependence, 83,* 65-72.)

Be Aware

- Use an evidence-based protocol with an effective magnitude
- Must be therapeutic

- Track/monitor all inventory
- Security/Theft
- Fraud monitoring

- Policy issues still in flux
  - SAMSHA annual limits ($75/$15)
  - OIG guidance, HHS anti-kickback statutes, fraud, waivers
  - IRS issue ($600)
  - ASPE report

Suggested Readings

- OIG guidance
- ASPE report

- Prize CM resources:
  - Rash (2023). Implementing an evidence-based prize CM protocol for stimulant use. Journal of Substance Use and Addiction Treatment.
  - Clinician Manuals for Prize CM (one for abstinence and another for attendance): https://health.uconn.edu/contingency-management/training/training-related-links/
  - VA papers
  - CTN studies
- Voucher resources:
  - Higgins
  - Use a protocol that has been shown to be effective in rigorous RCTs
  - Find a protocol that matches your focus (e.g., stimulant abstinence)
  - California materials are available online

Thank you

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https://health.uconn.edu/contingency-management/