



Implementing Contingency Management Techniques within AI/AN Treatment Populations

Matt Ignacio MSSW

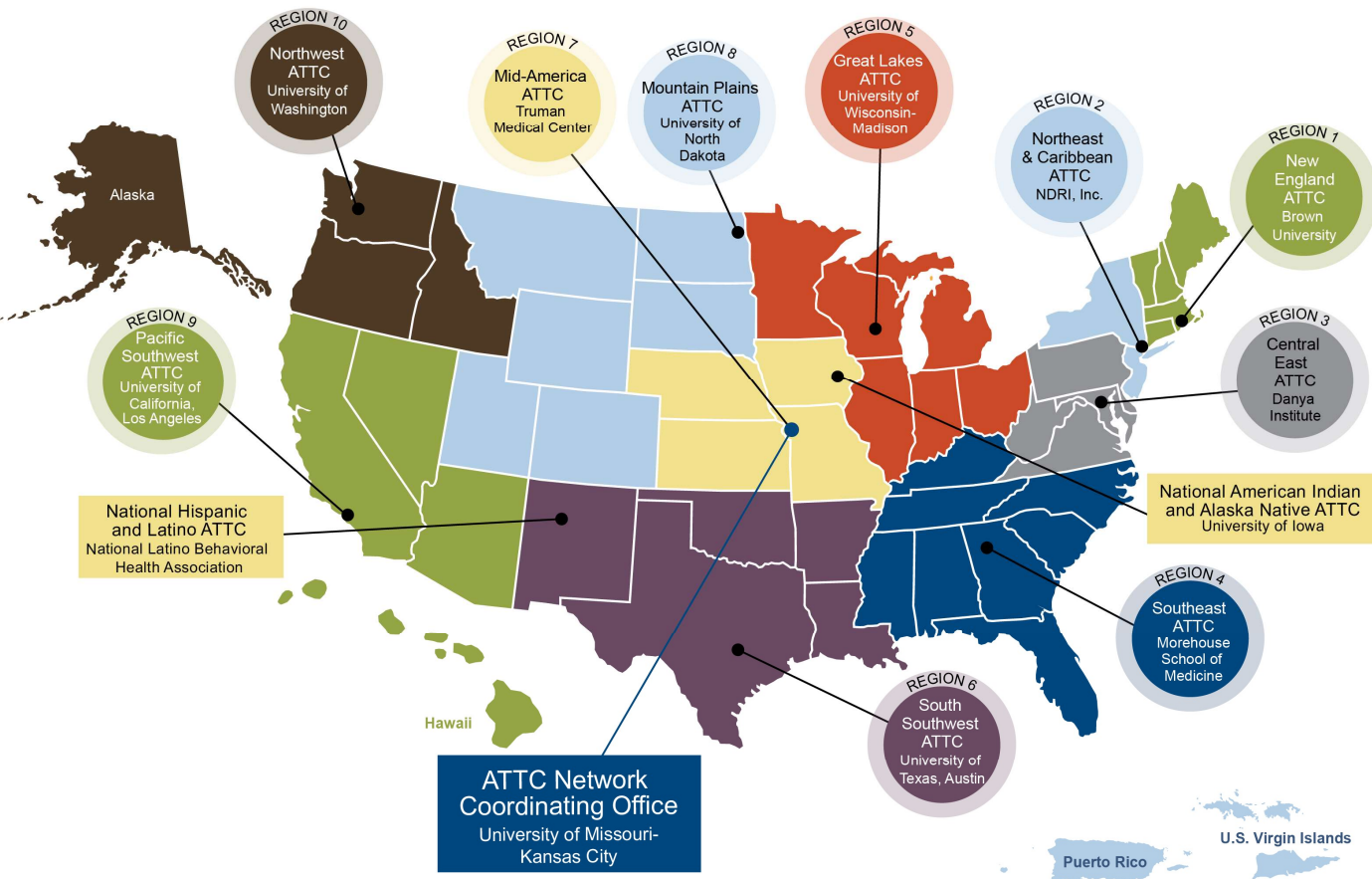
Anne Helene Skinstad PhD

May 2020



ATTC Addiction Technology Transfer Center Network
Funded by Substance Abuse and Mental Health Services Administration

U.S.-based ATTC Network



National American Indian & Alaska Native ATTC

This webinar is provided by the National American Indian & Alaska Native ATTC, a program funded by the Substance Abuse and Mental Health Services Administration (SAMHSA).

SAMHSA

Substance Abuse and Mental Health
Services Administration

- The National American Indian and Alaska Native Mental Health Technology Transfer Center is supported by a grant from CSAT/SAMHSA.
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Webinar follow-up

Evaluation: SAMHSA's GPRA

This webinar is provided by the National American Indian & Alaska Native MHTTC, a program funded by the Substance Abuse and Mental Health Services Administration (SAMHSA).

Participation in our evaluation lets SAMHSA know:

- How many people attended our webinar
- How satisfied you are with our webinar
- How useful our webinars are to you

You will find a link to the GPRA survey in the chat box. If you are not able to complete the GPRA directly following the webinar, we will send an email to you with the survey link. Please take a few minutes to give us your feedback on this webinar. You can skip any questions that you do not want to answer, and your participation in this survey is voluntary. Through the use of a coding system, your responses will be kept confidential and it will not be possible to link your responses to you.

We appreciate your response and look forward to hearing from you.



Today's Speakers

Anne Helene Skinstad, PhD

Dr. Anne Helene Skinstad is a clinical professor in the Dept. of Community & Behavioral Health, College of Public Health, University of Iowa. She is the Project Director of the National American Indian & Alaska Native Addiction, Mental Health and Prevention Technology Transfer Centers. Previously, Dr. Skinstad was the chief psychologist for the first in-patient treatment unit for alcoholic women at the Hjellestad-Clinic in Bergen. As an ATTC director she has overseen the development of different training curricula on treatment of substance use disorders with different special populations, like women, clients identified as Lesbian, Gay, Bisexual, and Transgender Individuals with substance use disorder, clients with co-occurring mental health and substance use disorders, and Native Americans with substance use disorders. She has also overseen the cultural adaptations of different curricula to Native American tribal communities, such as motivational interviewing and clinical supervision. She received her Ph.D. and her PSY. D, from the College of Psychology, University of Bergen in Norway.



Today's Speaker

Matt Ignacio, Tohono O'odham, MSSW

Prior to his work with the National American Indian and Alaska Native ATTC, Matt worked for the National Native American AIDS Prevention Center (NNAAPC) as Project Manager overseeing four federally funded training, education and capacity-building assistance programs. In this role, he also served as a national trainer, working with tribal communities, tribal health departments, state health departments, federally qualified health centers and community based organizations.

Additionally, Matt also served as lead author for a 2013 Centers for Disease Control and Prevention funded publication titled: Action, Compassion and Healing: Working with Injection Drug Users in Native Communities. The publication aimed to address the public health needs of Native American/Alaska Native and Native Hawaiian injection drug users in rural/reservation and urban communities. Prior to NNAAPC, Matt worked in the Michael Palm Center for AIDS Care and Support at Gay Men's Health Crisis (GMHC). GMHC is the world's first and largest AIDS service organization located in New York City. He is currently a Doctoral Student in the School of Social Work at the University of Washington.



Presentation Outline

- Learning objectives & Introductions
- Historical overview
- Learning principals
- CM examples
- CM in Native communities
- Conclusion



Presentation Outline

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Objectives for this awareness training

- Understand how contingency management programs can enhance treatment outcomes and facilitate patient recovery
- Identify key behavioral terms, definitions, and principles underlying successful contingency management programs.
- Describe contingency management strategies.
- Review data specific to the use of contingency management with Native American and Alaskan Native population.



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History & Research

Decades of evidence

1940s

- Token Economy
- Tokens were provided to patients suffering from Schizophrenia when they exhibited non-disruptive behaviors.
- Used on schools and prisons



History & Research

1960s

- Following B.F. Skinner, clinicians and researchers applied operant conditioning principles using token economies to treat persons with major mental health disorders (ie, schizophrenia)
- Operant conditioning principles were then used with patients in treatment for substance use disorders
- Drug use is maintained, in part, by the positively reinforcing effects of the drug itself
- Need to change the reinforcement structure to reinforce abstinence and other behaviors that compete with drug use

- Kazdin & Bootzin, 1972; Skinner, 1953



History & Research

1970s

- Drs. Cohen, Liebson, and Bigelow studied reinforcement principles with patients being treated for alcohol use disorders
- Dr. Maxine Stitzer studied using reinforcers with patients being treated with methadone for opioid dependence
 - Reinforcers were earned for treatment attendance or drug-free urine samples
 - The use of reinforcers improved retention, attendance, and abstinence

- Bigelow & Silverman, 1999; Cohen, et al, 1971; Stitzer et al, 1993



History & Research

1980s

- Dr. Stephen Higgins began studying reinforcement principles with patients being treated for cocaine dependence
- Patients earned vouchers for drug-free urine screens
 - For example, in one study, 75% of the patients who received incentives plus treatment as usual were retained in the 6-month study vs. only 40% of those who received only treatment as usual
 - And 55% of patients who received incentives plus treatment as usual achieved at least 10 weeks of continuous cocaine abstinence vs. 15% of those who received only treatment as usual

- Higgins et al, 1994



History & Research

1990s

- Dr. Ken Silverman conducted further research with patients in inner city treatment settings and looked at duration of incentive programs and incentive magnitude
- Among patients dependent on opioids who were stable on methadone but continued to use cocaine, adding voucher incentives to treatment as usual increased abstinence from cocaine
- A year long voucher-based incentive program helped patients maintain high levels of abstinence from cocaine and opioids
- Silverman also began studying the effects of differing incentive values

- Silverman et al, 1996

- Silverman, et al, 1999



History & Research

2000s

- Dr. Nancy Petry designed the fishbowl method of delivering incentives
- Petry demonstrated the fishbowl method could significantly reduce the cost of incentive programs without losing effectiveness
- Based on Petry's work, NIDA's CTN began a large-scale study called MIEDAR (Motivational Incentives to Enhance Drug Abuse Recovery)

- Petry, 2000; Petry & Martin, 2002



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Founding principles: The three essential elements



Target behaviors must be readily detected



Tangible reinforcers are provided whenever the targeted behavior is demonstrated



When the target behavior does not occur, the reinforcers are withheld

Founding principles



Identify target behavior



Choice of target population



Choice of reinforcer



Incentive magnitude



Frequency of incentive distribution



Timing of incentive

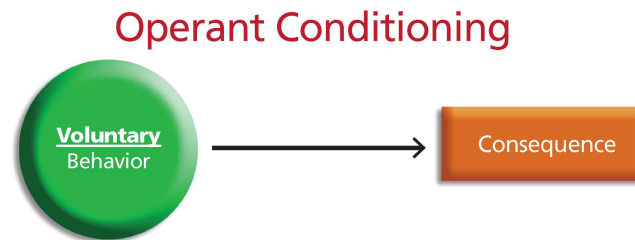


Duration of intervention

Definitions

Operant Conditioning

- **Operant Conditioning** refers to an association between a voluntary behavior and consequence



- The nature of the consequence will impact whether the behavior occurs again

Contingency management incentives are positive reinforcers (consequences) use to increase a desired behavior

Definitions

Reinforcement/Reinforcers

- **Reinforcement** strategies increase the occurrence of a specific, desired behavior by breaking a larger goal down into smaller "baby steps" and reinforcing each of the steps as it occurs
- **Reinforcers** are given at a high frequency for small, manageable instances of behavior change with the intent to make the reinforcers easy to earn
- **Rewards** mark an accomplishment or milestone worthy of celebration





Definitions

Positive Reinforcement

Positive reinforcement involves presentation of a pleasant stimuli after a desired behavior occurs

Example: You go to work every day, perform expected duties and receive a paycheck at regular intervals

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Contingency Management



Used as an adjunct to other therapeutic clinical methods



Motivate patients through stages of change to achieve an identified goal



Enhance treatment and facilitate recovery



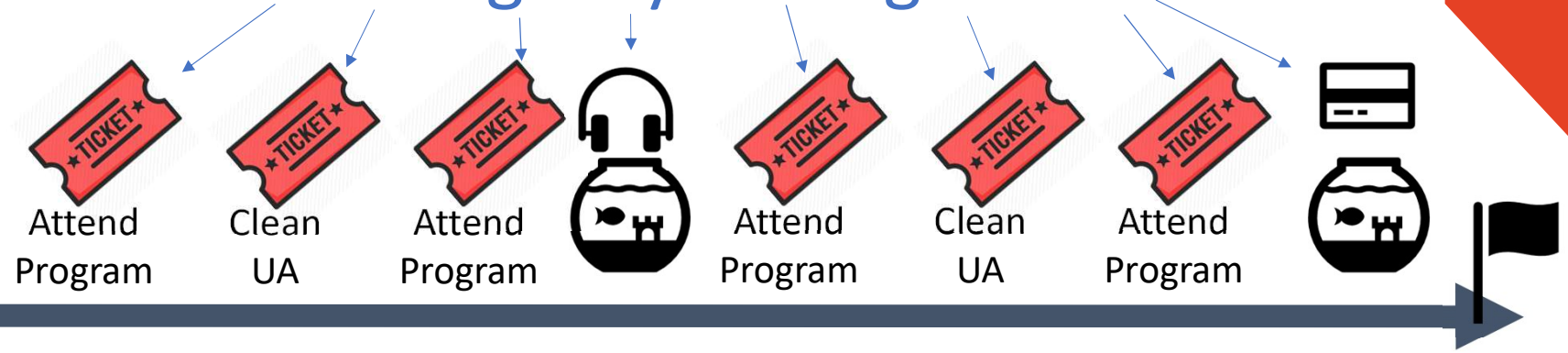
Target specific behaviors included in a patient's treatment plan



Celebrate the changed behavior

CM Timeline

Contingency Management




Gas card prior to
program Start

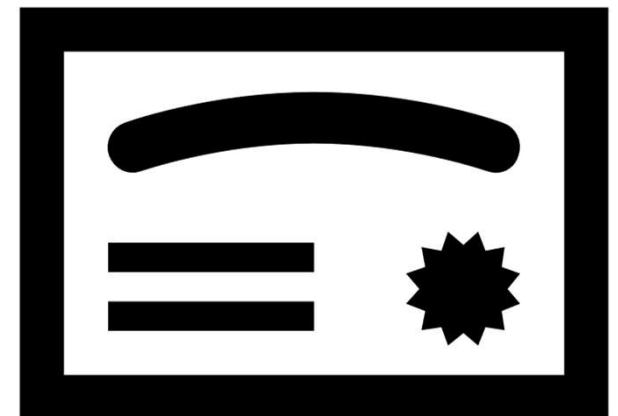
Other Incentives


Groceries or
supplies after
program ends

Types of Contingency Management

Voucher-Based Incentives

- Receive a standard voucher for each drug-free urine sample or negative breathalyzer result
- Voucher has a cash value that may then be used to obtain various goods, services, or items that can be part of a health life
- Includes gas cards, clothes, movie passes, etc.



Types of Contingency Management

Prize incentives/Fishbowl method

- Variable reward immediately after positive behavior (i.e. negative UA)
- Exchanges a prize slip for a selected prize from the cabinet
- Select an increasing number of draws each time they display a targeted behavior
- Lose the opportunity to draw a prize with a positive urine screen, but are encouraged and supported
- When test drug-free again, they start with one draw



Low-cost incentives

Fishbowl ticket ratios

Example ticket ratios:

Ticket	Cost	Chance
Good job!	\$0	50.0%
Small	\$1-2	41.8%
Large	\$20	8.0%
Jumbo	\$80-100	0.2%





Example



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History & Research

Motivational Incentives for Enhanced Drug Abuse Recovery (MIEDAR)

- 400 patients enrolled in NIDA's CTN study
- Patients who reported cocaine, methamphetamine or amphetamine use were enrolled in one of two treatment conditions
 - Treatment as usual plus abstinence-based incentives
 - Treatment as usual (no incentives)
- Received an average of \$120 in incentives per participant over 12 weeks

Patients receiving incentives...

- Reduced their alcohol and stimulant use when given lower-cost incentives
- Submitted more stimulant and alcohol-negative samples
- Attended more counseling sessions and had longer periods of abstinence

Stitzer et al.,2010



History & Research

AI/AN Populations 2010-2020

Assessing the Interest and Cultural Congruence of Contingency Management as an Intervention for Alcohol Misuse among Younger American Indian Adults (Hirchak et al., 2019)

Goal: Assess interest in CM for younger AI adults

Findings: Four overarching themes emerged:

1. Importance of choice
2. Providing practical and fun prizes: Offering prizes, cultural activities, and activities that capture attention of younger adults as part of CM were ideal for engagement
3. Barriers: access, retention, transportation, and environmental factors
4. Intervention includes marketing and outreach to increase community involvement and intervention visibility



History & Research

AI/AN Populations 2010-2020

Focus groups to increase the cultural acceptability of a contingency management intervention for American Indian and Alaska Native Communities (Hirchak et al., 2018)

- Reinforcers should align with existing cultural and community practices and facilitate cultural and family engagement.
- CM needs a champion such as an Elder or a community leader to enhance community fit and increase sustainability.
- Implement cultural activities along with CM to increase community participation and integration of the intervention.
- Present-day implications of the history of research among AI/AN communities must be considered.



History & Research AI/AN Populations 2010-2020

Use of evidence-based treatments in substance abuse treatment programs serving American Indian and Alaska Native communities (Kovins et al., 2016)

Population: Data comes from the Centers for AI/AN Health's Evidence-Based Practices and Substance Abuse Treatment for Native Americans Project

Table 2
Percentages of participants having different levels of treatment use.

	Raw ratings							Descriptive Ratings		
	Not familiar 0	Not interested in 1	See pros and cons 2	Planning on using 3	Using but not permanent 4	Permanent use 5	Used in past 6	Percent with rating ≥ 4	Mean rating	SD of ratings
Psychosocial treatments										
Cognitive behavioral therapy	4.2	1.1	8.9	3.7	24.1	56.4	1.6	82.2	4.2	1.3
Relapse Prevention therapy	17	3.2	6.4	4.8	14.9	52.6	1.1	68.6	3.6	1.9
Motivational interviewing	11.1	2.6	10.5	9	19.5	45.7	1.6	66.8	3.7	1.7
Twelve-step facilitation	24.1	7	10.7	4.3	9.1	41.6	3.2	54	3	2.1
Matrix model	25.9	10.6	19.1	7.4	12.2	18.5	6.4	37	2.4	1.9
Contingency management	55.3	7.4	13.7	5.8	6.3	9.5	2.1	17.9	1.4	1.8
Behavioral couples therapy	69.3	3.1	16.2	4.2	4.2	2.6	0.5	7.3	0.8	1.4
Community reinforcement & family training	80	5.8	4.2	7.9	2.6	2.1	0.5	5.2	0.6	1.3
Multisystemic therapy	81.5	5.8	7.9	1.1	1.1	1.6	1.1	3.7	0.4	1.1
All psychosocial treatment ratings								95.8	2.2	2.1
Medication treatments										
Meds for Comorbidity	37.9	4.2	11.1	3.7	7.4	35.3	0.5	43.2	2.5	2.2
Meds for relapse prevention	26.5	14.8	24.9	5.8	9.5	16.4	2.1	28	2.1	1.8
Meds for withdrawal	32.6	25.3	15.8	2.6	6.8	15.3	1.6	23.7	1.8	1.8
All medication treatment ratings								54.2	2.1	2

History & Research

AI/AN Populations 2010-2020

The Dissemination and Implementation of Contingency Management for Substance Use Disorders: A Systematic Review (Oluwoye et al., 2019)

- Review of 24 articles about dissemination and implementation of CM
- Elements identified to increase adoption
 - Collaboration when developing CM procedures
 - Identifying an implementation leader
 - Ongoing supervision
 - Fidelity monitoring
- Barriers
 - Cost
 - Staffing



History & Research

AI/AN Populations 2010-2020

A culturally-tailored behavioral intervention trial for alcohol use disorders in three American Indian communities: Rationale, design, and methods (McDonnell et al., 2016)

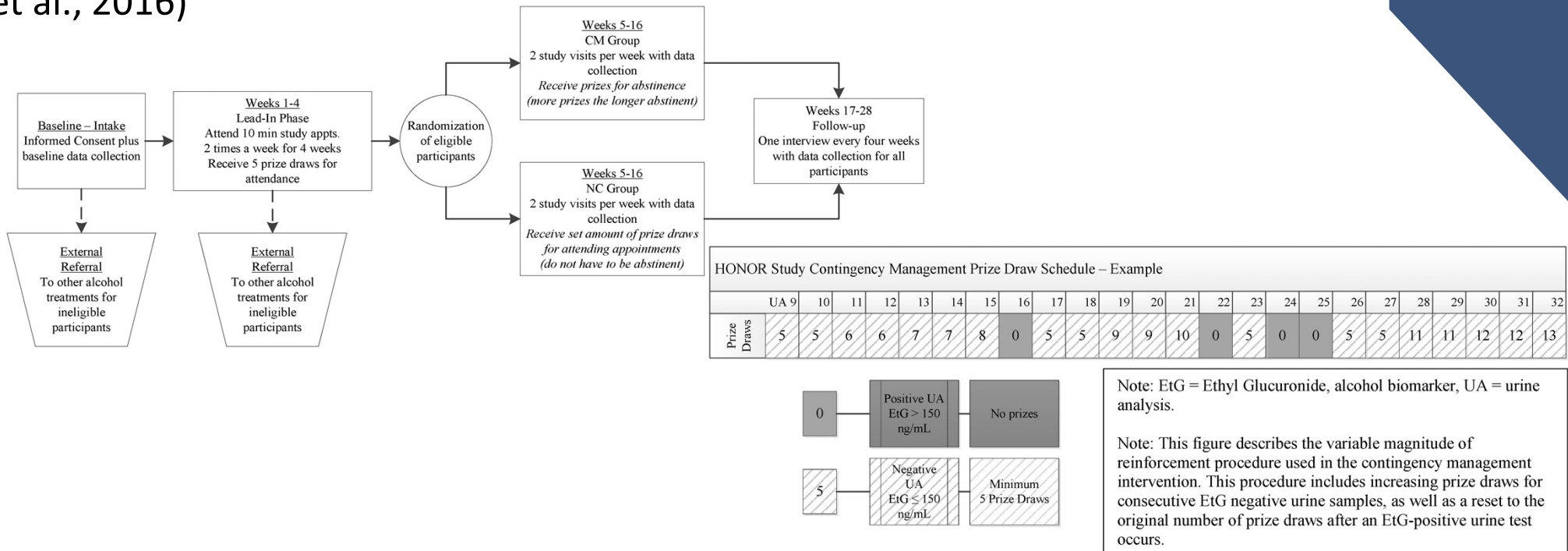
- Study: Largest controlled trial of CM for Native Americans
- Population: 400 Northern Plains AI/AN who suffer from AUD
- Program: Conducting the Honoring Our Native Ongoing Recovery (HONOR) study funded by NIH
- Results of trial not yet published



History & Research

AI/AN Populations 2010-2020

A culturally-tailored behavioral intervention trial for alcohol use disorders in three American Indian communities: Rationale, design, and methods (McDonnell et al., 2016)



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Contingency Management Challenges



Cost of incentives



On-site testing



Counselor resistance



Tribal Community resistance



Common Concerns

Isn't this just rewarding patients for what they should be doing anyway?

How do I set up a prize cabinet to deliver prizes (incentives)?

Does it lead to increased gambling among patients in treatment?

Perspectives

"I felt that I was going down the drain with drug use, that I was going to die soon. This got me connected, got me involved in groups and back into things. Now I'm clean and sober."

- Patient

"We came to see that we need to reward people where rewards are few and far between."

"We use rewards as a clinical tool - not as bribery - but for recognition."

"The really profound rewards will come later."

-Provider

"The staff have heard patients say that they had come to realize that there are rewards just in being with each other in group. There are so many traumatized and sexually abused patients who are only told negative things. So, when they heard something good - that helps to build their self-esteem and ego."

-Administrator

- Kellogg et al, 2005

Why contingency management?



Increase patient motivation



Facilitate therapeutic progress and goal attainment



Improve attitude and morale among clinicians and administrators



Better treatment outcomes



Conclusion

Contingency management is a tool based in behavioral theory in which you reward positive behavior

It can be implemented in Native settings to improve treatment outcomes



Thank you to staff contributors to current 2020 CM edition

2020 Edition Contributors

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- Steve Steine MA, CADC



Previous blending teams and contributors to PAMI editions

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Resources

National Institute on Drug Abuse (NIDA)

- <http://www.nida.nih.gov/blending>

NIDA's CTN Dissemination Library

- <http://ctndisseminationlibrary.org>

National AI/AN ATTC TOR webpage

- <https://attcnetwork.org/centers/national-american-indian-and-alaska-native-attc/tor-resource-page>



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- Oluwoye, O., Kriegel, L., Alcover, K. C., McPherson, S., McDonell, M. G., & Roll, J. M. (2019). The dissemination and implementation of contingency management for substance use disorders: A systematic review. *Psychology of Addictive Behaviors*.



SAMHSA OTAP Contingency Management

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May 12, 2020



SAMHSA
Substance Abuse and Mental Health
Services Administration

TOR Funding – Contingency Management

- The TOR Funding Opportunity Announcement for FY2020 allows grantees to provide prevention, treatment, and recovery support services to address opioid and stimulant use disorders, including the use of contingency management strategies.
- Each individual contingency must be \$15 or less in value and each individual client may not receive contingencies totaling more than \$75 per year.
- FY2018 and FY2019 TOR grantees are able to provide programmatic incentives as part of the client's treatment plan.

GPRA Incentives

- In addition to Contingency Management incentives, grantees may provide up to \$30 non-cash incentive to individuals to participate in required GPRA data collection follow-up and discharge interviews (maximum of \$60 per client).

TOR Allowable Activities

TOR grantees may provide support to treatment and recovery clients, such as the following:

- Transportation costs
 - Gas cards, bus passes, Uber rides
- Culturally appropriate and traditional practices
 - Supplies for traditional crafts, pottery, basket weaving, beading, etc.
 - Fishing, expeditions, retreats.
- Light snacks, not to exceed \$3.00 per person
- Health and nutrition programs as part of recovery activities
 - Nutrition classes
 - Yoga and acupuncture as part of recovery.

TOR Allowable Activities (cont.'d)

- Skill building
 - Financial classes
- Employment assistance
- Other incentives:
 - Hygiene products
 - Gift cards
 - Calling cards

Questions?

Contact your GPO to discuss Contingency Management and Motivational Incentives.

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