"Ideas for Treatment Improvement"

ADDICTION Messenger

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Motivational Incentives - Part 1
An Outcome Improvement

"A thing long expected takes the form of the unexpected when at last it comes."

~ Mark Twain (1835 – 1910) ~

Evidence is mounting to support the use of motivational incentives in addiction treatment. Use of low-cost incentives has improved attendance, reduced the number of positive urine screens, and contributed to positive early recovery experiences for clients in all levels of care. This three part AM series will review some key aspects of using incentives and introduce you to a new product developed by the NIDA-SAMHSA Blending Initiative. The Blending Initiative is a unique partnership that uses the expertise of both the National Institute on Drug Abuse (NIDA) and the Substance Abuse and Mental Health Services Administration (SAMHSA), to combine science and service to improve addiction treatment and encourage the use of current, evidence-based practices (EBPs) by addiction professionals.

The recently created Blending Initiative product, ***Promoting Awareness of Motivational Incentives (PAMI),*** is designed to build awareness and encourage the use of Motivational Incentives (MI) as an EBP for the addiction treatment field.

Enhancing a client's motivation and engagement in individualized treatment is always a concern for addiction counselors and the agencies they work in. Active engagement in treatment increases a client's likelihood of achieving a positive outcome. When used to acknowledge achievements in the treatment process, incentives can be related to important internal client processes such as the instillation of hope, the development of stronger self-efficacy, and the subsequent adoption of health-promoting behaviors.

On the other hand, clients who do not experience success in treatment tend to have a higher need for additional services (emergency visits, hospital admissions) and provider time. It is difficult to determine treatment effects when clients are not attending regularly or completing assignments. Understanding motivational incentives and strategies that have the potential to enhance a client's engagement in treatment is crucial.

The use of motivational incentives in addiction treatment is based upon simple behavioral principles - if a behavior is reinforced or rewarded, it is more likely to occur in the future. Positive behavioral changes in clients can be influenced by the use of motivational incentives. Motivational Incentives is a term synonymous with Contingency Management and is often used interchangeably. Both terms are based upon principles of behavioral modification. Contingency Management was first used in the 1960s and is based on the work of behaviorist B. F. Skinner's idea of operant conditioning. Reinforcement is the key element in Skinner's Stimulus-Response theory. A reinforcer is anything that strengthens the desired response in a person's behavior. It could be verbal praise, a good grade, a feeling

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of increased accomplishment or satisfaction, or a tangible item that has value to the client. The schedule of reinforcement (e.g. interval versus ratio) also has an effect on strengthening and maintaining behaviors. This refers to how often the client will be rewarded. There are five kinds of schedules that can be used: fixed interval, variable interval, fixed ratio, variable ratio, and random.

A ***fixed interval*** schedule:
Rewards are provided after a fixed amount of time. For example, after attending a group meeting, having a clean UA, or arriving for counseling appointments,

A ***variable interval*** schedule:
Rewards are provided after varying amounts of time. Examples: sometimes it will be after each meeting, clean UA or appointment. Or it could be after every three, five or seven times. The treatment program knows the reward schedule but the clients do not. They know it could be sooner or it could be later.

A ***fixed ratio*** schedule:
Rewards are provided after a desired behavior occurs, like attending group meetings, for instance. The schedule could be one reward after each third meeting. This would be a fixed ratio of 1:3, or every third positive behavior will be rewarded. This type of ratio tends to lead to poor compliance or positive behavior changes, since clients know that their first two positive behaviors will not be rewarded, and the third one will be no matter what.

A **variable ratio** schedule:
Rewards are provided based on the average number of positive behaviors. A variable ratio of 1:3 means that on average, one out of every three positive behaviors will be rewarded. It might be the first. It might be the third. It might even be the fourth, as long as it averages out to one in three.

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A **random** schedule:
Rewards for your client's positive behaviors could be provided at any time.

Main Objectives of A Motivational Incentive Program

Positive rewards can be used to increase client retention in treatment - a strong predictor of positive treatment outcomes. It can also be used to increase:

- the number of clients attending group counseling,
- the number of clients who enroll in skills training or an educational program,
- the number of clients who achieve employment and retain it for two months, and
- the number of clients who attain drug-free status.

In addition, using motivational incentives provides an avenue for recognizing and celebrating client success in attaining their goals and other achievements - a valuable mechanism for fostering positive self-image. Using motivational incentives creates an ongoing, consistent approach that demonstrates staff and peer support to the client, something for which clients repeatedly express appreciation and gratitude. Other benefits can be seen in the motivation of other clients who observe and emulate the behavior of successful peer models.

Seven Principles of Motivational Incentives

***1. Target behavior*:** In selecting a target behavior choose something that is problematic and in need of improvement. It is vital that the behavior you select be observable and measurable. The target behavior is the centerpiece of the *behavioral contract*, which, in turn, provides the framework within which incentives can be successfully used (Petry, 2000).

An important consideration in choosing target behaviors for incentives programs is the question of the level of difficulty involved in exhibiting that behavior. Sometimes when programs consider using incentives, they begin by trying to acknowledge "good" behavior. The "reinforcement" model (Kellogg et al., 2005) emphasizes breaking the goal down into very small steps and then reinforcing each of the steps as they occur.

In a number of successful contingency management studies (i.e., Peirce et al., 2006), a significant number of patients never received a reinforcer because they were unwilling to exhibit the target behavior. This is clearly a significant problem. There are two ways that this can be approached. One is to increase the amount of reinforcement, and the other is to initially lower the requirements for earning a reinforcement. In other words, you may need to alter the target behavior to make it more achievable for the client.

2. Choice of target population. While it might be ideal to provide reinforcements for all patients in a program, this may not be feasible or even necessary. This means that choices will need to be made regarding which group or subpopulation to target with reinforcement-based interventions. For example, clinicians could target those who are not responding to treatment, regardless of drug of choice. Another would be to target new patients so as to help increase the likelihood that they would stay in treatment. A third would be to target the users of a specific substance.

***3. Choice of reinforcer*:** The choice of reinforcer or reinforcers is a crucial element in the design of a motivational incentives program. Incentives that are perceived as desirable are likely to have a much greater impact on behavior than those that are perceived as being of less value or use. One way of maximizing the impact of this approach is to survey patients and find out what prizes they would see as desirable. A related way is to ask patients who are offered the intervention what they might want to work for and make sure that these items are available. Three basic types of incentive programs have been used: (a) contingent access to clinic privileges; (b) on-site prize distribution; and (c) vouchers or other token economy systems.

***4. Incentive magnitude*:** Interwoven within the discussion as to which reinforcer to use is the question of how much reinforcement to provide. This is because the magnitude of reinforcement needed to sustain change may differ for different behavior targets. A related idea would be the use of different levels of reinforcement for reinforcing different behavior patterns. Polysubstance users, for example, may need greater amounts of reinforcement than patients who use only a single substance. There may be significant difference among patients that contribute to a greater or lesser response to incentive programs. Stitzer et al. (1984) felt that such factors to consider could include: (1) the level of past and present drug use; (2) the patient's history of success or failure at stopping the use of drugs; (3) the presence or absence of Antisocial Personality Disorder; (4) the nature and vitality of their social networks; and (5) their own personal historical responsiveness to reinforcements and punishments as motivators for behavior change.

***5. Frequency of incentive distribution*:** Another factor that is intertwined with the choice and magnitude of the incentive is the frequency of its distribution. This is also known as the schedule of reinforcement (Kazdin, 1994; Petry, 2000). The decision about reinforcement frequency is likely to be connected to such factors as target behavior, resources available, and amount of clinical contact desired. This means that programs would need to wrestle with the question of whether to reinforce a behavior every time that it occurs, or only some of the time that it occurs.

***6. Timing of the incentive*:** The core principle here is that the reinforcement needs to follow the exhibition of the target behavior as closely as possible. In the studies using methadone take-home doses (Stitzer et al., 1993), it was important that the patients received the doses as immediately as possible – perhaps within 24 to 48 hours at the outside. In models using points and vouchers, the actual goods and services are delivered at a later date, but the token, point, or voucher is delivered when the target behavior is exhibited. The conclusion is that the more rapidly the incentives are distributed, whether material or symbolic, the more effective they will be.

***7. Duration of the intervention*:** The last factor that must be considered is how long to continue to provide incentives for desirable behavior. Ultimately, patients will need to internalize the recovery process and find or develop naturally-occurring reinforcers that will support their recovery-based and non-addict identity (Biernacki, 1986; Kellogg, 1993; see also Lewis & Petry, 2005). The issue here may be whether the psychosocial treatments that accompany the incentives can be continued long enough for both the underlying addictive disorder to be addressed and the behavior change needed for a lasting drug-free lifestyle adopted and sustained during the course of the treatment. A lengthier duration of the use of incentives might help make this happen.

*Condensed from the article **"Motivational Incentives: Foundations & Principles"** by Scott H. Kellogg PhD, Maxine Stitzer PhD, Nancy Petry PhD and Mary Jeanne Kreek MD. (Unpublished chapter)*

Next Issue:

"The Challenges"

Source:

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Petry, Nancy (2003) Psychiatric Times: Special Report **Contingency Management in Addiction Treatment,** Retrieved from World Wide Web on July 12, 2007: www.psychiatrictimes.com/p020252.html

Petry, NM, et al (2000). **Give them prizes, and they will come: Contingency management for treatment of alcohol dependence.** Journal of Counseling and Clinical Psychology, Vol. 68 (2), pp.250-257.

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"Substance Abuse Treatment Workforce Survey 2005" HIGHLIGHTS # 7

Directors and clinicians provided self-report proficiency and training interest for all 28 Addiction Counseling Competency areas (Technical Assistance Publications (TAP) 21). Data was placed in a matrix to identify training priorities. For directors and clinicians, the 5 most common Level 1 training priorities identified were:

- ***drug pharmacology***
- ***gender specific treatment***
- ***racial/ethnic specific treatment***
- ***co-occurring disorders***
- ***offender treatment***

Level 2 Training Priority: High Proficiency High Interest	**Level 1** Training Priority: Low Proficiency High Interest
Level 4 Training Priority: High Proficiency Low Interest	**Level 3** Training Priority: Low Proficiency Low Interest

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