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# Optimizing Contingency Management with Methamphetamine-Using Men who Have Sex with Men

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# Abstract

Among men who have sex with men (MSM), methamphetamine use is associated with multiple, overlapping syndemic conditions including increased risk for HIV seroconversion and onward HIV transmission. Contingency management (CM) is an evidence-based, behavioral intervention implemented to curb methamphetamine use and optimize HIV/AIDS prevention among MSM in San Francisco since 2003. We conducted a program evaluation to document the evolution of this 12-week CM program to include delivery of brief, individual counseling incorporating motivational interviewing and behavioral skills. A drop-in group delivered concurrently with CM urine-screening visits also provides peer support as well as referrals for other social and medical services. From December 2011-October 2013, a total of 131 clients enrolled in the CM program and provided a median of 22 urine samples (Interquartile Range = 10–34) that were non-reactive for methamphetamine. Findings support the feasibility and acceptability of integrating individual and group counseling with community-based CM for methamphetamine-using MSM.

# Keywords

Contingency Management; HIV; Men who Have Sex with Men; Methamphetamine

# Introduction

Among men who have sex with men (MSM), problematic patterns of alcohol and other substance use are prevalent and associated with profound health disparities (Patterson et al., 2005; Halkitis et al., 2008; Mimiaga et al., 2008b). Approximately 5% of the population in the United States reports *lifetime* methamphetamine use (National Institute on Drug Abuse [NIDA], 2013), but estimates of the prevalence of *recent* methamphetamine use among

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MSM are two to four times greater (Shoptaw & Reback, 2007; Finlayson et al., 2011). In San Francisco, more than one in ten MSM reported recent methamphetamine use between 2011–2014 (from 12–13%), using time-location sampling that focused on MSM frequenting gay-identified venues (Raymond et al., 2013; NHBS 2014). Methamphetamine-using MSM are also more likely to experience multiple, overlapping syndemic conditions including elevated distress, intimate partner violence, housing instability, and adverse health outcomes such as HIV seroconversion (Stall et al., 2003; Plankey et al., 2007; Ostrow et al., 2009; Koblin et al., 2006), as well as hastened HIV disease progression (Carrico et al., 2014b).

Cognitive and behavioral interventions to reduce methamphetamine use have the potential to partially unravel the complex syndemic facing MSM, but scalability and sustainability are important structural barriers. Although it has been more than a decade since the implementation of expanded public health efforts to address the methamphetamine epidemic among MSM, comprehensive intervention approaches are still desperately needed (Shoptaw et al., 2006; Nanin et al., 2006). Relatively few treatment centers offer specific programs for this population (Cochran, Peavey & Robohm, 2007), but there is some evidence to suggest that culturally-tailored substance abuse treatment leads to better outcomes for gay and bisexual men (Senreich, 2010; Shoptaw et al., 2008, Shoptaw et al., 2005). Even where culturally-tailored approaches are available for substance-using MSM, many experience difficulties completing treatment and polysubstance use is associated with a poorer treatment response (Shoptaw et al., 2008, Shoptaw et al., 2005, Reback et al., 2012). Clearly, there is a need for scalable intervention approaches that can reach the broader population of methamphetamine-using MSM, many of whom are not seeking formal substance abuse treatment (Carrico et al., 2016).

Contingency management (CM) with thrice-weekly urine-screening is an evidence-based, behavioral intervention that utilizes tangible incentives as positive reinforcement for abstinence from stimulants such as methamphetamine (Prendergast, Podus, Finney, Greenwell, & Roll, 2006). However, mixed results from randomized controlled trials conducted with methamphetamine-using MSM highlight the potential pitfalls of implementing CM with this population (Menza et al., 2010; Shoptaw et al., 2005). One randomized controlled trial with treatment-seeking, methamphetamine-using MSM in Los Angeles observed that those receiving CM, either alone or in combination with cognitivebehavioral therapy (CBT), achieved greater abstinence compared to those receiving CBT only (Shoptaw et al., 2005). Another randomized controlled trial with homeless, nontreatment-seeking MSM in Los Angeles observed that a 24-week CM intervention reduced methamphetamine use and increased health-promoting behaviors compared to a notreatment control condition during the intervention period (Reback et al., 2010). These intervention-related changes were durable, maintained up to six months after the conclusion of CM. In another randomized controlled trial of CM with non-treatment-seeking, methamphetamine-using MSM in Seattle, urine-screening visits for methamphetamine were conducted twice-weekly instead of thrice-weekly due to poor attendance (Menza et al., 2010). Because twice-weekly urine-screening provides a window for methamphetamine use to go undetected, the subversion of contingent reinforcement of methamphetamine abstinence may explain the iatrogenic effects of CM reported in this trial (i.e., increased methamphetamine use and serodiscordant, condomless sex relative to a non-treatment

control condition). Bearing in mind that beneficial outcomes have been found to be more robust in trials with greater researcher involvement in the CM protocol, such as assistance with manualization, regular quality control, evaluation meetings, and direct observation (Prendergast et al., 2006), further research is needed to document the successful implementation of CM with methamphetamine-using MSM in community settings.

From 2003–2005, a 12-week CM intervention for methamphetamine-using MSM was pilottested in San Francisco (Shoptaw et al., 2006; Strona et al., 2006). Operated in three health settings with duties resting mostly on staff without professional training in substance abuse treatment, the Positive Reinforcement Opportunity Project (PROP) enrolled 143 methamphetamine-using MSM. Participants provided a mean of 15 of 36 (42%) possible urine samples that were non-reactive for methamphetamine and one-third completed the 12week CM intervention (Shoptaw et al., 2006; Strona et al., 2006). CM has been continuously implemented since by the San Francisco Department of Public Health as part of a spectrum of services for substance-using MSM (Carrico et al., 2014a). The overarching purpose of this study was to document the evolution of PROP by community-based substance abuse treatment providers to include delivery of brief individual counseling as well as a drop-in peer support group. To illustrate the ways in which these enhancements were responsive to the complex needs of methamphetamine-using MSM, we provide a case study highlighting how this enhanced CM program acknowledges trauma as an important risk factor and trigger for methamphetamine use. We also include the descriptive results of thrice-weekly urinescreening using clinical records from this enhanced CM program as a key process indicator to demonstrate its continued success with engaging methamphetamine-using MSM in San Francisco.

# Methods

#### **PROP Program Description**

The Stonewall Project is a program of the San Francisco AIDS Foundation focused on providing substance abuse counseling and formal outpatient substance abuse treatment for MSM through a spectrum of harm reduction based programs. PROP has been one of these programs since 2010. PROP is run by a Program Manager (RA) with experience in the design and implementation of CM as well as other integrative services (e.g., mindfulness) with this population. The Program Manager trains and supervises the three part-time staff and volunteer peers who oversee community outreach and implementation of the enhanced CM program. The responsibilities of staff range from maintaining the drop-in group space, urine testing, brief counseling, incentive disbursement, and providing referrals. Volunteers assist with many of these tasks, except for those of financial nature. Typically, training consists of three to four weeks of directly supervised work. The Program Manager conducts a thorough intake assessment to examine the sexual health and substance use history of clients to determine eligibility (Carrico et al., 2016a; Carrico et al., 2015a). MSM who report recent methamphetamine use are eligible to enroll in the enhanced CM program.

During CM urine-screening visits, clients receive tangible incentives as positive reinforcement for methamphetamine abstinence. All clients in the CM program are encouraged to pursue abstinence from methamphetamine during the 12-week CM period in

order to receive CM incentives, to the extent that it matches their personal goals. Urine sample collection is directly observed by CM program staff. The voucher for the initial sample that is non-reactive for methamphetamine metabolites is worth \$2.00. Vouchers increase in value by 25 cents for each consecutive methamphetamine-free sample to a maximum of \$10.00. Participants earn an \$8.50 bonus voucher for every third consecutive methamphetamine-free sample. A rapid reset procedure allows participants to return to their place in the escalating reinforcement schedule after producing three consecutive urine samples that are non-reactive for methamphetamine (Shoptaw et al., 2006). The total possible reinforcement is \$330, and participants may choose to receive incentives earned at any time during or after the 12-week CM intervention period.

Urine samples that are reactive for methamphetamine are handled in a non-judgmental manner and clients are encouraged to pursue abstinence from methamphetamine if they wish to receive the CM incentives. Because the Stonewall Project is implementing a spectrum of substance abuse treatment services from a harm reduction perspective with methamphetamine-using MSM (Carrico et al., 2014a), this has led to two key enhancements to the core behavioral CM protocol for PROP. First, brief individual counseling is delivered during regularly scheduled CM urine-screening visits. Consistent with screening, brief intervention and referral to treatment (SBIRT) interventions (Humeniuk et al., 2012), the brief counseling model is designed to be delivered by providers without extensive training in psychotherapy. Second, clients may attend a drop-in support group facilitated by staff and PROP alumni that is held concurrently with thrice-weekly CM urine-screening visits.

#### Brief individual counseling

At PROP, clients receive brief counseling during CM urine-screening visits that incorporates skills derived from evidence-based psychotherapies. The primary goals of these brief counseling interactions are three-fold: 1) support continued engagement with the CM urine-screening visits; 2) assist clients with taking steps toward changing their methamphetamine use behaviors; and 3) facilitate linkage to community resources such as formal substance abuse and mental health treatment, social welfare services, HIV testing, and HIV medical care. The model for brief counseling integrates elements of motivational interviewing (MI) and behavioral interventions, consistent with prior research demonstrating the efficacy of these approaches with substance-using MSM (Carrico et al., 2016).

The spirit of MI is the foundation of the low-threshold orientation for services at PROP. These low-threshold clinical interactions are characterized by empathy and non-judgement, where clients are encouraged to attend regardless of whether they have been using methamphetamine or other substances. No client at PROP is denied services because they have been using methamphetamine or other substances. Consistent with the client-centered, directive spirit of MI, brief individual counseling elicits change talk by encouraging clients to examine their desire, ability, reasons, or need for change their relationship with methamphetamine. This is accomplished using the foundational MI skills of open-ended questions, affirmations, reflections and summaries (Miller & Rollnick, 2013). The supportive, non-judgmental approach of MI is designed to increase motivation of clients to utilize selected behavioral techniques along the lines of behavioral shaping, goal-setting, and

problem-solving to identify and pursue their own goals for changing aspects of methamphetamine use including, but not limited to abstinence. For example, clients can choose to develop goals for changing the mode of administration, quantity, or frequency of methamphetamine use.

Individually-delivered counseling at PROP operates within a framework of partnership, acceptance, compassion, and evocation to assist clients with pursuing self-identified goals for behavior change. Consequently, the brief counseling supports men with examining the spectrum ways they can take concrete steps towards changing methamphetamine use or mitigating the related harms of methamphetamine use. This MI approach is particularly useful at urine-screening visits where men provide a urine sample that is reactive for methamphetamine to enhance intrinsic motivation and self-efficacy for behavioral change, regardless of whether this includes abstinence from methamphetamine to receive the CM incentives. In fact, many clients at PROP are not ready, willing, or able to completely abstain from methamphetamine at enrollment, and this MI approach is designed to maximize the benefits of the clinical interactions with PROP staff during all urine-screening visits.

Brief counseling also includes the delivery of three key behavioral skills. First, clients are encouraged to explore internal and external triggers for their methamphetamine use as well as develop plans for avoiding these triggers. Second, clients are encouraged to identify achievable goals that are relevant to changing one's methamphetamine use. Goal-setting exercises are client-driven and can include goals that more broadly address relevant drivers of methamphetamine use such as housing, subsistence needs, medical care, case management-related requests, and treatment for co-occurring mental health disorders. Third, problem-solving skills are employed to develop a plan for action and self-monitoring for progress towards meeting these goals.

#### **Drop-in Support Group**

Ongoing support and socialization in the safe, non-judgmental environment of the drop-in group is seen as an important component of the enhanced CM program. The dialogue fostered in this drop-in group, facilitated by PROP staff, is generally unstructured, staff-supervised and participant-driven. Peer socialization is thought to be particularly important in this population, because clients often experience social isolation and social anxiety, which are significant obstacles in changing methamphetamine use (Kurtz, 2005; Nanin et al.,, 2006; Mimiaga et al., 2008a; Shrem & Halkitis, 2008; Semple et al., 2011; Parsons, Grov, & Golub, 2012). The supportive group environment may also be therapeutic, because clients commonly report having difficulties interacting with fellow gay, bisexual, or other MSM outside of the sexually-charged contexts where methamphetamine is used (Semple, Strathdee, Zians, & Patterson, 2010). For many clients, the drop-in group provides a novel opportunity to engage in supportive, peer-to-peer interactions outside of the context of sex and methamphetamine use.

During the drop-in group, staff are encouraged to provide support to clients in their efforts to change important aspects of their methamphetamine use as well as build a culture in the group that is supportive of recovery and health. Another novel aspect of the group is continued involvement of clients who have completed the CM program (i.e., PROP alumni)

to build a community of men that are supportive of reducing harms related to methamphetamine use. Alumni of the CM program are encouraged to attend the drop-in group to provide support and mentorship to men who are actively completing the thrice weekly urine-screening visits. Alumni also take a leadership role in building a community that is supportive of recovery in separately scheduled alumni groups following the conclusion of the 12-week CM intervention period. The aforementioned leadership role refers to clients who after completing the intervention take on tasks similar to those of staff in charge of the drop-in groups, in a volunteer capacity, although a number of former PROP clients have secured part-time positions with the organization in similar roles.

Topics relevant to HIV/AIDS prevention are often addressed directly in the drop-in group. All clients are encouraged to seek out testing for sexually transmitted infections. Those who are HIV-negative are provided with referrals to HIV testing and pre-exposure prophylaxis (PrEP) navigation. HIV-positive clients are made aware of the potential benefits of engaging in HIV care and are provided with referrals to health navigators, as needed.

#### **Clinical Record Data**

Basic demographic data and results of CM urine-screening tests were extracted from the clinical records for 131 clients who enrolled in PROP from December 2011 to October 2013, following the introduction of individual counseling and the drop-in group components. All study procedures including a waiver of informed consent for extracting data from extant clinical records were approved by the Institutional Review Board at the University of California, San Francisco.

# Case Study

This case study was produced in an interview with the PROP Program Manager to develop a representation of his clinical experiences with numerous clients enrolled in the enhanced CM program. To protect confidentiality, this is a fictitious case study and an amalgamation of multiple clients. The term "Counselor" here refers to the role that the program manager and other staff at PROP take on while engaging with clients in the context of the one-on-one brief counseling that is part of the CM experience. Given the nature of the low-threshold services, time constraints, and staff training, we distinguish brief counseling from formal outpatient psychotherapy delivered by a licensed master's level therapist or psychologist.

Manny is a 56-year-old Latino, HIV-negative, non-gay identified man who has sex with other men. He lives in a single resident occupancy hotel in the Tenderloin district of San Francisco. Manny learned about PROP from a flyer he picked up in the lobby of his building. He has been through multiple outpatient and 12-step programs, with limited success addressing the negative consequences of his methamphetamine use. Due in part to these unsuccessful previous attempts and their MSM-focused approach, Manny is initially leery of PROP, appearing uncomfortable in the drop-in group room. A counselor greets him and offers him tea and snacks. Manny declines, but a few minutes later asks if it would be okay for him to have a granola bar. The counselor gets him one and makes an attempt to bring him into the conversation. After a few minutes, the intake counselor brings Manny into

the counseling room to screen him for PROP. He introduces himself, then asks Manny to tell him about his recent substance use.

Client "Well, that would be Saturday."

Counselor: "What substances are you using?"

Client: "Mostly meth. I sometimes smoke pot, to calm down."

Counselor: "How often do you use?"

Client: "Every couple weeks, mostly just when getting off with other guys"

Counselor: "What are your preferred routes of use?"

Client: "I slam [inject], usually."

Next the counselor further assesses Manny's sex with other men, to confirm his eligibility.

Counselor: "Tell me a little bit about the sex you have with men."

Manny reports that due to shame and embarrassment, he only has sex with other men while using methamphetamine and that he often gets high to be able to have sex with other men. He says that methamphetamine makes him feel "invincible", although his accounts also suggest some negative aspects of methamphetamine use. The counselor then explains the incentives of the program. Manny expresses concern about being successful, as he has a fair amount of ambivalence about abstaining -due to the aforementioned unsuccessful attempts in his past, as well as methamphetamine serving as a gateway to sex- but would like to cut down. The counselor highlights that just making a commitment to show up and touch base can be an important step toward understanding whether and how he might want to change his relationship with methamphetamine. The counselor engages in a goal-setting exercise and Manny agrees that his goal would be to attend the next CM urine-screening drop-in group.

**Counselor:** "So, using meth has some benefits for you; it helps you overcome negative thoughts and feelings about sex with men."

**Client:** "Yeah, I mean I can't imagine what it would be like to have sex with another guy without it, especially the few times that I bottom. To be honest, I can't remember the last time I had sex with a man while sober, but I know that it makes me do some dumb shit like barebacking- I try to pull out, though, but it's harder to be in control of a situation when you're the one bottoming. Seriously, I can't really see myself quitting now, but I know something has to change, too."

**Counselor:** "You're thinking about changing some aspects of your meth use. Tell me more about that."

**Client:** "I mean, it's really hard to even think about what I might change. I think I could probably use less meth; maybe not get as tweaked out as I did last weekend."

Counselor: "What happened last weekend?"

**Client:** "It's kind of embarrassing, but I got really spun. It was hard to think clearly and I started to feel really paranoid, like people on the street were watching me and wanted to hurt me when I left my building. I also thought people were monitoring me through my cell phone and ended up taking it apart, because I was convinced it was bugged."

**Counselor:** "You see where using meth has caused some problems in the past and there are times where it just isn't fun anymore. Using less meth is something you'd like to think more about. How does that sit with where you're at now?"

**Client:** "Yeah, that's right. Okay, I'm not making any promises here, but I can definitely try to come back next Monday."

**Counselor:** "Great, our inclination is to meet our clients where they're at, so how about we check in next Monday and see how things have been going then. At PROP, there are no judgments and we welcome people to join us in the group room regardless of whether they are high, low, or somewhere in between. Change is a process, not a destination."

The counselor also asks Manny about his last HIV test, and Manny notes that it's been "a few months" since his last test and he expresses feelings of anxiety about the testing process. Manny tries to minimize these anxieties by suggesting that his HIV risk is minimal, on account of him being mostly a top. The counselor thinks it would be a good idea to introduce Manny to one of their staff HIV testers, and asks Manny permission to make this introduction. The HIV tester also happens to be Latino, which helps in increasing Manny's comfort with the testing process. Manny agrees to get tested that same week, and the counselor takes this opportunity to ask Manny about his knowledge about PrEP, but Manny is quick to say that he is already a bit too overwhelmed by the testing itself to consider PrEP at this time.

After enrolling in PROP, Manny is slow to build trust. However, during the first few weeks he becomes more open and starts to talk in more detail about his use of methamphetamine, as well as how this is linked to feelings of shame around his sexuality. Manny reports having sex with men only when he is high, and mentions that after talking with the HIV test counselor, he is considering the option of going on PrEP. The PROP counselor takes this opportunity to link Manny's sexual behaviors with his methamphetamine use and talks about ways he might be able reduce the harms associated with the more detrimental aspects of his use. They identify a variety of different harm reduction techniques such as smoking instead of injecting or actively monitoring the amount of methamphetamine used, but these seem to have little appeal. However, when the counselor reframes the possibility of decreasing methamphetamine use as an opportunity to create the space to look at the issue with more clarity, Manny seems intrigued by the idea.

**Counselor:** "Great to see you today Manny and your urine sample was reactive for meth. How have things been going with your meth use?"

**Client:** "I definitely want to earn some cash, but I'm still not really feeling this whole abstinence thing."

**Counselor:** "Completely abstaining from meth is a tall order for you right now. What about doing less slamming, and instead smoking or snorting meth when you use?"

**Client:** "Yeah, I am just not sure I want to quit completely, yet. The high also feels so much better when I slam. I just don't think it would be the same if I smoked."

**Counselor:** "Sometimes people see this issue as black or white; you're either sober or partying. One thing that might be helpful is to look at all the shades of grey in between. What steps might you take to change your relationship with meth that feel reasonable right now?"

**Client:** "You know, I do feel hopeless that way sometimes. It's like I am using already, so I might as well go all out. Maybe it would be doable to start keeping tabs on how much meth I slam and see if I can use less over time."

**Counselor:** "That sounds like a really reasonable goal. Maybe start tracking the amount you're using over the next few days and we can check back in during your next PROP visit. Even though you don't receive an incentive when you are reactive for meth, there are a lot of positive steps you are taking to explore how your relationship with it might change."

Client: "Sounds good. Thanks for not lecturing me today about using."

Manny is, at first, what the counselors at PROP refer to as a "Stop/Start" participant, which is to say he misses a number of urine screens when he knows he has been using methamphetamine. The counselor tries to reframe reactive urine screens, not as a failure, but as an opportunity to fulfill his initial goal to attend urine-screening visits without being abstinent from methamphetamine. Manny experiences some success in reducing his methamphetamine use, and seems happy and appreciative. This opens the door for the counselor to suggest a new, achievable goal of using less frequently. Manny is enthusiastic about this idea, based on his previous success, and over the second month of his tenure at PROP, almost half of Manny's urine screens are non-reactive to methamphetamine. Manny also begins to discuss his experiences of shame and guilt around his sexual behaviors that are important triggers for his use. Manny describes how he learned to hide his sexuality completely and feels the need to "check out" when having sex. He also discloses his history of sexual abuse as a child.

**Counselor:** "Manny, your urine screen was non-reactive for meth for the third visit in a row. That's about a week without using, which I know didn't come easy. You have been putting in a lot of effort to accomplish this. Tell me how things have been going for you."

**Client:** "I can't complain really. I stayed away from cruising on apps this weekend, so I didn't use. It also feels nice to be earning a little bit of money."

**Counselor:** "You decided to avoid some triggers for using meth and it feels good to be earning some of the PROP incentives. You can see where this is paying off."

**Client:** "Yeah, it's surprising how something so little can make such a big difference, but I want to buy my mom a nice birthday present next month."

Counselor: "That sounds like a great goal. What obstacles might stand in your way?"

**Client:** "Yeah, I have been thinking a lot about that. Since I haven't been using, I have been starting to have thoughts and memories coming back that I don't like at all."

Counselor: "What's been going on?"

**Client:** "I really have a hard talking about this stuff. My dad was an alcoholic and barely around when I was growing up. My uncle, his brother, would watch me while my mom was at work and he would make me do sexual stuff with him. When I am not using, I start to feel those experiences come back. I feel pretty gross."

**Counselor:** "Manny, I'm so sorry that happened. You're right, that is a tough subject to address and unfortunately, many of the men we see at PROP have gone through similar experiences. Using meth can provide an escape from all those negative thoughts and feelings. I really appreciate you sharing that; it takes a lot of courage. What do you think would be a good way to manage these feelings, in place of using meth?"

**Client:** "Thanks, it's really embarrassing to talk about and you're honestly the first person I've ever told. I think my mom would just die if she ever knew what he did. I can kind of handle these feelings, but it feels overwhelming when I have sex with guys. It's like I'm seven years old all over again and he is touching me. I dunno, maybe I can hook up a little less often for a while and I won't feel like I have to use meth then."

**Counselor:** "It sounds like right now hooking up can be a little overwhelming and bring up a lot of thoughts and feelings that make you feel like you need to check out. Is there anything that can help you not feel so overwhelmed besides getting high?"

**Client:** "Well, I've gone a couple times to the book club here at Stonewall and we are reading a book about mindfulness. I feel really comfortable there and find the reading helpful."

**Counselor:** "Is there anything in particular about the reading that is helpful around those overwhelming thoughts and feelings?"

**Client:** "Yeah, I think it's the stuff about self-acceptance and letting go of judgment. Something about that seems to help me feel a little better about myself and it's nice to be around other people I feel kind of get what I'm going through."

Counselor: "That's great! Do you think setting a goal around this would be helpful?"

Client: "Yeah, I think that would make me feel better."

**Counselor:** "Let's come up a with a specific plan. What could you realistically commit to over the next week?"

**Client:** "I could read a few pages of the book every night and make sure I go back to group on Thursday."

Client: "It sounds like you've got a plan. I'll be really interested to see how it goes."

Manny continues attending the book club and reports enjoying the spiritual aspect of the book and finds himself feeling less overwhelmed by the triggering thoughts. He decides to enroll in the Stonewall Project's outpatient substance abuse treatment program and is put on a waitlist. Manny continues to consistently make his CM appointments, even when he did not abstain from methamphetamine use. Manny also continues to make strides in his ability to examine how sexuality-based trauma and childhood sexual abuse contribute to the feelings of shame and guilt he experiences that are key drivers of his methamphetamine use.

Over time, Manny also starts to feel more comfortable in the drop-in group. During one of the groups, a fellow PROP participant discloses his history of childhood sexual abuse, and mentions a group he frequently attends for survivors of sexual abuse. Manny sits with this information for about a week, but eventually decides to attend the group. During that first visit, Manny recognizes the fellow client from the PROP drop-in group and they end up striking a casual conversation. This experience allows Manny to disclose this trauma and the ensuing negative schema he developed in the outpatient substance abuse treatment he begins receiving at the Stonewall Project.

By his third and final month at PROP, Manny has made a handful of friends and attends other groups focused on recovery with them. Manny also begins socializing with other group members on the weekends without using methamphetamine. He eventually begins a romantic relationship with one of the men in the drop-in group. Manny indicates that this is the first time he has dated a man and he recently had the experience of having sex with this man without using substances. Manny is surprised about how natural this experience has felt and he expresses gratitude about the experience of emotional intimacy. During his final month at PROP, all of Manny's urine screens turn up non-reactive to methamphetamine, bringing his total tally to 19 out of a possible 36 results.

**Counselor:** "So, your urine was non-reactive for methamphetamine and that's 10 visits in a row, Manny! You are really working hard to stay on track with your goal of using less and it has some real benefits."

**Client:** "You know, I couldn't have imagined it would ever turn out this way at the beginning. I've really been enjoying not using meth and I am feeling re-connected with a lot of parts of my life that I had lost touch with. It's been so great to be talking to my mom on a regular basis again, too."

**Counselor:** "It has been so amazing to see how this process has unfolded for you, Manny. You have been really brave in tackling some difficult experiences from your childhood and you have really stepped up to address them head-on by enrolling in treatment."

**Client:** "Yeah, and I never thought I would have made friends here, let alone be dating someone."

After completing the program, Manny continues to come to the PROP alumni group and eventually volunteers for the PROP program two days a week to host the drop-in group. He completes the Stonewall outpatient substance abuse treatment program and starts going to the groups to continue with his recovery. He is also meditating and picking up an old practice of Buddhist chanting. He reports attending gay-based venues with the man he is dating, as well as friends he has made in and out of PROP. Manny notes, "Everything feels different to me now. I'm listening to music I used to like years ago and dancing in the morning, I'm making friends and not isolating. I'm developing a social life with gay men and talking regularly with my mom. I'm not using meth. It blows me away!"

# Results

Among the 131 men who enrolled in PROP from December 2011 to October 2013, the median age was 44 (Interquartile Range [IQR] = 35-51) years and 60% were HIV-positive. Clients provided a median of 22 urine samples (IQR = 10-34) that were non-reactive to methamphetamine, which is equivalent to more than seven weeks of abstinence.

#### Discussion

This study documented a model program for integrating the delivery of brief, individual counseling and a drop-in support group with community-based CM for methamphetamineusing MSM. The behavioral, abstinence-focused CM protocol provides a platform for the delivery of MI and the introduction of behavioral techniques, which would prime this traditionally non-treatment seeking clientele for engaging in formal substance abuse treatment following their involvement with PROP. This individual counseling during CM urine-screening visits creates opportunities for clients to examine and pursue a spectrum of self-identified goals for behavior change, including but not limited to abstinence from methamphetamine. The drop-in support group harnesses the power of social relationships with peers to address common concerns facing methamphetamine-using MSM and cultivate norms that promote recovery. The feasibility and acceptability of this enhanced, communitybased CM program is supported by descriptive findings that clients achieved seven weeks of abstinence from methamphetamine on average over the 12-week intervention period. This meets or exceeds the degree of successful CM engagement observed in studies with methamphetamine-using MSM led by clinical researchers (Reback et al., 2010; Shoptaw et al., 2005; Shoptaw et al., 2006).

Operating within a harm reduction framework appears to be imperative to engage clients who are not ready, willing, or able to pursue abstinence from methamphetamine use at the outset of community-based CM. Brief, individual counseling leverages reactive urine toxicology results as an opportunity to reflect on self-identified goals for changing important aspects of methamphetamine in a non-punitive, judgment-free environment. This focus on harm reduction is further reinforced by peers and staff during the drop-in support group where clients can engage in difficult conversations around managing internal and external triggers without the requirement that they focus on complete abstinence from methamphetamine.

One potentially beneficial aspect of CM is that providing tangible incentives for methamphetamine abstinence can engage those who might not otherwise seek out services. This also provides opportunities to link methamphetamine-using MSM to HIV testing, as well as health navigators to support PrEP uptake or engagement in HIV care. The case study highlights that brief, individual counseling delivered during CM may also facilitate greater insight and awareness of underlying triggers for methamphetamine use, such as sexuality-based trauma. Although the enhanced CM program does not provide sufficient counseling to adequately address these prevalent, co-occurring stressful life experiences in methamphetamine-using MSM, it could support more efficient linkages to mental health or substance abuse treatment. This underscores the need for further clinical research to develop and test trauma-informed approaches that address the intersection of post-traumatic stress disorder symptoms, stimulant use, and HIV/AIDS in this high priority population (Carrico et al., 2016; Safren, Blashill, & O'Cleirigh, 2011).

This study does not come without its limitations. For instance, clients are not required to provide a urine sample that is reactive for methamphetamine at enrollment, due to concerns that this would promote methamphetamine use in the community to meet the CM inclusion criteria. In fact, many clients attempt to achieve some early abstinence from methamphetamine prior to enrolling in CM in an effort to maximize the incentives they will receive, making it impossible to include only those who provide a urine sample that is reactive for methamphetamine. Consistent with the harm reduction approach of this enhanced CM program, urine samples were also not screened for cocaine prior to November of 2013. This is an important limitation because studies consistently highlight that the use of stimulants, including powder cocaine and crack-cocaine, has negative implications for HIV/ AIDS prevention in MSM (Carrico et al., 2014b; Ostrow et al., 2009). Further research is needed to document the implementation of this enhanced CM intervention where incentives are provided only when clients provide urine samples that are non-reactive for both methamphetamine and cocaine metabolites. Finally, although many clients remain engaged in the alumni group for this enhanced CM program, we were unable to extract data from the clinical records to systematically document degree of engagement into his component. Although we did not collect HIV risk behavior data during this study, an ongoing randomized controlled trial is measuring potentially amplified HIV transmission risk in 110 HIV+, methamphetamine-using MSM enrolled in PROP (Carrico et al., 2016a).

Despite these limitations, this program evaluation suggests that implementing low-threshold individual and group services during community-based CM is feasible and acceptable. Potentially scalable approaches like enhanced, community-based CM are desperately needed to begin to address the complex needs of this marginalized, underserved population of MSM.

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