Year 2:

**Study 1:** mHealth to Increase HIV Medication Adherence and Reduce HIV Risk Behaviors among Gay/Bisexual Men in Treatment for Methamphetamine Abuse

**Study 2:** Contingency Management to Increase Linkage to and Retention in HIV Care among MSM and Transgender Women

Cathy J. Reback, Ph.D.
Friends Research Institute, Inc.
UCLA CFAR
Preliminary Study using Text Messaging to Reduce Methamphetamine Use and HIV Sexual Risk Behaviors among MSM

Funded by the Centers for Disease Control and Prevention grant #UR6PS000312.
Recruitment: Advertisement, Outreach, In-Services

Eligibility/Final Screen (N = 55)
- UAI with non-primary partner, previous 2 months
- Meth use, previous 2 months
- Out of treatment, not seeking treatment
- Not learned HIV+, previous 6 months

Baseline (N = 52)
- ACASI
- HIV test
- Urine drug screen
- $25 incentive

Daily Delivery (2 weeks)
- Engagement
- Research Interventionists
- 400 Prewritten

2-Month Follow-Up
- ACASI
- Urine Drug Screen
- $50 incentive
- 48/50 (96%)

Ineligible; Tested HIV+ at screen (n = 3)

Risk Areas Screened to Tailor Text
1. General
2. HIV status
3. Frequency of use
4. Method of Administration
5. Drug/sex location
6. Sexual positioning
7. Stages of change regarding meth use

Withdrawn by P.I. (n = 2)
Text Messaging System

Theoretical Constructs
- Social Support Theory
- Informational Support
- Emotional Support
- Instrumental Support
- Health Belief Model
- Health Threat
- Health Behavior to Reduce Threat
- Awareness of Health Risk
- Social Cognition Theory
- Self-regulation Skills
- Self-efficacy

Risk Areas
1. General
2. HIV status
3. Frequency of use
4. Method of Administration
5. Drug/sex location
6. Sexual positioning
7. Stages of change regarding meth use

Engagement Research Interventionists

400 Prewritten

Delivery Plan
Daily for 2 weeks, tailored to response over time
Within 30 minutes – welcome message

Fully Engaged (n = 38)
Limited responders (n = 10)
Non-responders (n = 2)

Maximum or 20 messages sent per conversation; 4 conversations per day

Days 1-3 – 3 messages
Days 4-6 – 2 messages
Days 7-14 – 1 message

Weekly follow-up reminder
<table>
<thead>
<tr>
<th>Social Support Theory</th>
<th>Risk Area</th>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informational Support</td>
<td>General</td>
<td>“did he give u a bug? Here’s where 2 go.”</td>
</tr>
<tr>
<td>Emotional Support</td>
<td>Stages of change regarding meth use</td>
<td>“Would U stop if U could?”</td>
</tr>
<tr>
<td>Instrumental Support</td>
<td>Method of use</td>
<td>“Needle exchange 2nite @ Sycamore and Romaine btwn 7 – 11 pm”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health Belief Model</th>
<th>Risk Area</th>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Threat</td>
<td>Frequency of use</td>
<td>“R U going out w/crystal 2nite? Stay safe. 2 much tweak &amp; freak is harsh 2 ur body”</td>
</tr>
<tr>
<td>Health Behaviors to Reduce Threat</td>
<td>Sexual positioning</td>
<td>“dip it don’t stick it”</td>
</tr>
<tr>
<td>Awareness of Health Risks</td>
<td>Sex location</td>
<td>“Goin 2 the bathhouse 2nite? Most guys @ baths r poz. B safe!”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social Cognition Theory</th>
<th>Risk Area</th>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-regulation Skills</td>
<td>HIV+ status</td>
<td>“Take ur meds in the AM or b4 u rest to avoid being a hot mess.”</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>HIV- status</td>
<td>“Say 1st thing ur neg &amp; always use condoms, like u did last time. U can do it!”</td>
</tr>
</tbody>
</table>
For additional information on the development of the intervention and/or outcomes, please see:


Study 1

mHealth to Increase HIV Medication Adherence and Reduce HIV Risk Behaviors among Gay/Bisexual Men in Treatment for Methamphetamine Abuse
Methamphetamine Abuse Treatment for Gay and Bisexual Men (LAC, DHSP funded)

**Recruitment:** Advertisement, Outreach, In-Services

**Eligibility**
- Self-identified gay or bisexual man
- Self-reported meth use in the previous 12 mos
- Met DSM-IV TR criteria for meth abuse
- Seeking treatment for methamphetamine abuse

<table>
<thead>
<tr>
<th>0</th>
<th>Weeks 1-8</th>
<th>Weeks 9-24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screening and Informed Consent</td>
<td>Gay-Specific Cognitive Behavioral Therapy + Contingency Management 3x per week</td>
<td>Continuing Care 1x per week</td>
</tr>
<tr>
<td>Baseline Assessments Urine Drug Screen</td>
<td>3-month Follow-Up Evaluation Urine Drug Screen $40 Incentive</td>
<td></td>
</tr>
</tbody>
</table>
Getting Off: Gay-specific Cognitive Behavioral Therapy

www.friendscommunitycenter.org
Contingency Management: Increasingly Valuable Incentives for Urine Samples That Are Negative for Methamphetamine Metabolites
### Participant Demographic Characteristics from October 2009 – October 2012, (N = 325)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnicity</td>
<td>Caucasian/white</td>
<td>160</td>
<td>49.2</td>
</tr>
<tr>
<td></td>
<td>Hispanic/Latino</td>
<td>82</td>
<td>25.2</td>
</tr>
<tr>
<td></td>
<td>African American/Black</td>
<td>47</td>
<td>14.4</td>
</tr>
<tr>
<td></td>
<td>Multi-Ethnic/Other</td>
<td>36</td>
<td>11.1</td>
</tr>
<tr>
<td>Sexual Identity</td>
<td>Gay</td>
<td>290</td>
<td>89.2</td>
</tr>
<tr>
<td></td>
<td>Bisexual</td>
<td>35</td>
<td>10.8</td>
</tr>
<tr>
<td>HIV Status</td>
<td>HIV+</td>
<td>189</td>
<td>58.2</td>
</tr>
<tr>
<td>Age</td>
<td>Mean</td>
<td>40.8 years</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>Mean</td>
<td>13.9 years</td>
<td></td>
</tr>
</tbody>
</table>
Mobile Phone Ecological Momentary Assessments With and Without a Clinical Dashboard for Treatment-Seeking Gay and Bisexual Methamphetamine Users

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<thead>
<tr>
<th>0</th>
<th>Weeks 1-8</th>
<th>Weeks 9-24</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Phase I</td>
<td>Phase II</td>
</tr>
<tr>
<td>Screening and Informed Consent</td>
<td>GCBT + CM 3x per week</td>
<td>Continuing Care 1x per week</td>
</tr>
</tbody>
</table>

Consent (N = 60)

Randomized by:
- HIV Status (+, -)
- Age (<40, ≥40)
- Ethnicity (Caucasian/white, all other)

EMA (n = 30)
- Daily
- HIV Risk Behaviors
- Substance Use
- Cognitive Behavioral Therapy
- Medication Adherence for HIV+

EMA + Clinical Dashboard (n = 30)
- Daily
- HIV Risk Behaviors
- Substance Use
- Cognitive Behavioral Therapy
- Medication Adherence for HIV+
- Counseling 3x per week
Study 2

Contingency Management to Increase Linkage to and Retention in HIV Care among MSM and Caucasian Transgender Women
Linkage to Care for Transgender Women of Color Study Design (HRSA funded)

Social Network Recruitment (Respondent Driven Sampling)  
N = 325

HIV status  
Unknown  
n = 210

HIV Testing & Counseling

Retest in 3 months

HIV-

n = 185

HIV+

n = 25

Known HIV+  
n = 115

Existing HIV Prevention Service

Peer Health Navigation +  
Contingency Management  
n=140

Follow-up @ 3-, 6-, 9-, 12-months post enrollment

Health Outcomes

↑ Linkage & Retention in HIV Care  
+  
↑ HIV Milestones
Linkage to Care for MSM and Caucasian Transgender Women (LAC, DHSP funded)

- Social Network Recruitment (Respondent Driven Sampling) N=1,200
- HIV Testing & Counseling
  - Retest in 3 months
  - HIV-, n=1,122
  - Known HIV+, n=65
  - Newly HIV+, n=13
- Existing HIV Prevention Service
- Peer Health Navigation + Contingency Management
- Follow-up @ 3-, 6-, 9-, 12-months post enrollment
Adapting Contingency Management to Enhance Linkage to and Retention in HIV Primary Care
Thank you!

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