

# LINK LA (LINKING INMATES TO CARE IN LOS ANGELES)

## Good Evidence – Medication Adherence

Evidence-Based for Linkage to HIV Care

Evidence-Based for Retention in HIV Care

### INTERVENTION DESCRIPTION

#### Goals of Intervention

- Improve viral suppression

#### Target Population

- Men and transgender women with HIV who are released from jail

#### Brief Description

*LINK LA (Linking Inmates to Care in Los Angeles)* is a 12-session, 24-week peer-navigation intervention for people with HIV who are scheduled to be released from jail. LINK LA addresses individual factors by emphasizing the importance of retention in care and antiretroviral therapy (ART) adherence; behavioral factors related to HIV care and adherence by promoting self-efficacy, goal setting, and problem solving; and social-environmental factors by promoting social support and trusting relationships with peer navigators and clinicians. The intervention also teaches skills to overcome social stigma and discrimination, and facilitates access to care through appointment scheduling, reminders, transportation assistance, and meeting competing subsistence needs. Lay peer navigators are trained to act as role models to assist participants through each stage of the HIV continuum of care (e.g., linkage or re-engagement, retention, and antiretroviral adherence). Prior to the participants' release from jail, peer navigators meet with participants in a private conference room for 1-2 hours to deliver intervention content. After release, navigators meet with participants in private community settings and provide counseling on retention and adherence behaviors while accompanying participants to 2 HIV care appointments up to 24 weeks after release.

#### Theoretical Basis

- Social Cognitive Theory

#### Intervention Duration

- Twelve sessions: first 1 to 2-hour session was held prior to jail release; subsequent sessions were delivered up to 24 weeks after jail release

#### Intervention Settings

- Los Angeles County Jail
- Community settings

### Deliverer

- Trained lay peer navigators

### Delivery Methods

- Accompaniment to medical appointments
- Counseling
- Discussion/personal conversation
- Goal setting
- Patient education
- Problem-solving demonstration
- Skills building

### Structural Components

There are no structural components reported for this study.

## INTERVENTION PACKAGE INFORMATION

**An intervention package is not available at this time.** Please contact **William E. Cunningham**, University of California—Los Angeles, 1100 Glendon Avenue, Suite 850, Los Angeles, CA 90024.

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## EVALUATION STUDY AND RESULTS

### Study Location

The original evaluation study was conducted in Los Angeles (LA) County, California between 2012 and 2016.

### Key Intervention Effects

- Increased viral suppression

### Recruitment Settings

Los Angeles County Jail system

### Eligibility Criteria

Inmates scheduled for release from jail were eligible if they were 18 years or older; either male or transgender female with HIV; English speaking; selected for the transitional case management program prior to enrollment; resided in LA County; and eligible for ART or on ART while incarcerated.

### Study Sample

The baseline study sample of 356 men and transgender women is characterized by the following:

- 42% *Black, non-Hispanic*; 31% *Hispanic*; 27% *White, non-Hispanic*
- 42% *35-39 years old*, 39% *18-34 years old*, 19% *≥50 years old*
- 57% *Men who have sex with men (MSM)*; 17% *Heterosexual males*; 15% *Male to female transgender*
- 12% *Persons who inject drugs*
- 52% *Virally suppressed*
- 56% *No health insurance*

### **Assignment Method**

Participants (N = 356) were randomized to 1 of 2 study arms: the LINK LA Intervention (n = 180) or transitional case management control condition (n = 176).

### **Comparison**

Standard of care participants received transitional case management that included needs assessments, referrals for post-release housing, substance abuse treatment, and HIV care from case managers.

### **Relevant Outcomes Measured**

- Medication adherence was measured as mean percentage of ART doses taken using a visual analogue scale on a scale of 0 to 100%, and was measured at 3, 6, and 12 months after jail release.
- Viral suppression was defined as having an undetectable viral load (< 75 copies/mL) and was measured at 3- and 12-months post-intervention after jail release.

### **Participant Retention**

- LINK LA
  - 87% retained at 3 months after jail release
  - 79% retained at 6 months after jail release
  - 69% retained at 12 months after jail release
- Transitional Case Management
  - 90% retained at 3 months after jail release
  - 81% retained 6 months after jail release
  - 71% retained at 12 months after jail release

### **Significant Findings on Relevant Outcomes**

- LINK LA intervention participants were significantly more likely to be virally suppressed at 12 months after jail release than transitional care management participants (49% vs 30%, probability difference = 19%, 95% CI = 2-40%, p = 0.03).
  - Significant positive intervention effects were also seen for participants who were homeless (p = 0.004) and those who were virally suppressed at baseline (p < 0.001).
- There was a significant difference-in-difference of viral suppression probability over 12 months between LINK LA intervention participants and transitional care management participants (difference-in-difference = 22%, 95% CI = 3%-41%, p = 0.02).

### **Strengths**

- None identified

### **Considerations**

- This study did not meet best-evidence criteria because there was no significant effect on medication adherence at 3 months (p = 0.40), 6 months (p = 0.20), or 12 months after jail release (p = 0.50).

### *Additional significant positive findings on non-relevant outcomes*

- The study also meets evidence-based criteria for the Linkage to, Retention in, and Re-engagement Chapter for the following:

- LINK LA intervention participants were significantly more likely to be linked to HIV care from baseline to 6 months after jail release than transitional care management participants (89% vs 77%, difference = 12%, 95% CI = 4%–22%,  $p = 0.01$ )
- LINK LA intervention participants were significantly more likely to be retained in HIV care at 12 months after jail release than transitional care management participants (probability difference = 0.71 visits 95%CI = 0.01-1.40,  $p = 0.047$ ).

*Implementation-related findings*

• Fidelity

- Navigators received daily monitoring, weekly supervision, and periodic auditing of records.
- Navigators also completed a checklist documenting delivery of each session.
- Study staff conducted announced field visits to observe select intervention sessions and measured fidelity on a 3-point scale (1 = high; 2 = low). The overall mean fidelity rating was 1.6 (SD = 0.8).

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## REFERENCES AND CONTACT INFORMATION

Cunningham, W. E., Weiss, R. E., Nakazono, T., Malek, M. A., Shoptaw, S. J., Ettner, S. L., & Harawa NT. (2018). [Effectiveness of a peer navigation intervention to sustain viral suppression among HIV-positive men and transgender women released from jail: The LINK LA randomized clinical trial](#). *JAMA Internal Medicine*, 178(4), 542-553.

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