

# Scaling up Viral Suppression Support and Incentives for Vulnerable Populations: The Undetectables Program

Ginny Shubert, Housing Works  
Graham Harriman, New York City  
Department of Health



**FAST-TRACK CITIES 2019**

SEPTEMBER 8-11, 2019 | BARBICAN CENTRE

SPONSORED BY:



IN PARTNERSHIP WITH:



[HOME](#)[JOIN THE TEAM](#)[READ THE COMICS](#)[PARTNERS](#)

The power to LIVE UNDETECTABLE is yours

# UNDETECTABLES



You are living your life with HIV.  
Now harness your power to Live Undetectable.

[www.LiveUndetectable.org](http://www.LiveUndetectable.org)

# Agenda

- **The Undetectables Intervention**
- **Results of a 2-year Demonstration**
- **Scaling Up The Undetectables: a cross-sector approach**
- **Recommendations for Dissemination**

# THE UNDETECTABLES INTERVENTION

**UNDETECTABLES**





**WHO ARE THE UNDETECTABLES?**

**FIND OUT SPRING 2014**



# Context: Ending the Epidemic

The Undetectables is a recommended strategy to promote viral suppression to end the AIDS epidemic

THE  
NEW YORK  
BLUEPRINT  
TO END AIDS  
WILL

1

Identify persons  
with HIV who remain  
undiagnosed.

2

Link persons diagnosed  
with HIV to health  
care to achieve viral  
suppression and prevent  
further transmission.

3

Facilitate access to  
Pre-Exposure Prophylaxis  
(PrEP) and non-occupational  
post-exposure prophylaxis  
(nPEP) for high-risk persons  
to keep them HIV-negative.

How? By ending AIDS deaths and reducing new HIV infections to 750 or less by the end of 2020.

UNDETECTABLES



# The *Undetectables* Viral Load Suppression Project

- 24-month pilot launched March 2014
- Funded by the Robin Hood Foundation
- Integrated supports developed with UPenn
- Added financial incentives to our ART toolkit
- To empower clients facing barriers to health
  - Poverty
  - Housing and food insecurity
  - Behavioral health issues
- A project of Housing Works, a NYC CBO

Core to Housing Works' commitment  
to the NYS Plan to End our AIDS epidemic by 2020

UNDETECTABLES



# Multiple Goals

- Support clients to achieve and maintain undetectable viral load ( $\leq 50$  copies/ml)
- Get to least 80% viral suppression
- Recognize the heroic actions of clients
- Agency culture change focused on ending AIDS
- Address health disparities to leave no one behind
- Spread the liberating and stigma-busting news that **U**ndetectable equals **U**ntransmittable

**UNDETECTABLES**



# ***Culture change: Together, We Can End AIDS***

- **Social Marketing: Why become an Undetectable?**
  - Becoming an Undetectable is becoming a Hero!
  - Becoming an Undetectable improves your health, well-being, and life expectancy!
  - Becoming an Undetectable means you will not transmit HIV to sexual partners!
  - Becoming an Undetectable helps to end the HIV epidemic!
- **Agency-wide buy-in:**
  - Support from senior staff as an agency-wide priority
  - Information and training for all community members – staff and clients
  - Collaborative program evaluation and improvement
  - Undetectables Community Advisory Board
  - Building and sustaining momentum through accountability & celebration!

## **UNDETECTABLES**

 **HOUSING WORKS**  
HEALTHCARE

**UNDETECTABLES**

 **HOUSING WORKS**  
HEALTHCARE



**TRUST IN US  
WE CARE!**

# A Stepped Approach to ARV Adherence

## What's in the toolkit?

- Client centered ARV adherence planning
  - Integrated case conferences with the client, health care provider and case manager/care coordinator
  - Motivational interviewing
  - Assistance to meet subsistence needs
  - Behavioral health assessment/referral
- \$100 gift card incentive
  - For lab result showing undetectable viral load
  - Up to four per year
- Cognitive behavioral therapy (CBT) groups
- Adherence devices/medication reminders
- Directly observed therapy (DOT) – formal and informal



**UNDETECTABLES**





# Using the Toolkit

- For clients receiving Housing Works primary care and case management
- Stepped approach from least to most intensive
- Offer tools that meet the client's needs
- Adherence plans agreed by the client and their team
- Focus on client strengths as well as barriers
- Switch adherence tools as needed

**UNDETECTABLES**

# Financial Incentives

- Added to integrated care for people with HIV who face demonstrated barriers to ARV uptake and adherence
- Up to \$400 annually (\$100 gift card per quarter) for clients who achieve or maintain a viral load  $\leq 50$  copies/ml
- Clients have blood drawn at clinically appropriate intervals (determined by providers)
- Lab reports reviewed with the client by the primary care provider or registered nurse
- Quarterly lab work required for each incentive – ensures regular medical engagement for clients who face barriers to retention in effective ARV therapy
- A growing body of literature investigating the use of financial incentives to achieve health outcomes—see references below

**UNDETECTABLES**

# **24-MONTH DEMONSTRATION PROJECT EVALUATION**

**↓ UNDETECTABLES**



# Evaluation Design

- **24-month pilot** evaluated by the University of Pennsylvania
- **Community-based participatory** approach and **intent-to-treat** analysis
- Each participant used as **their own control** to assess viral load and cumulative viral exposure pre- and post-enrollment
- Mixed methods quantitative and qualitative study
- Examined: **Feasibility, Efficacy, and Cost-Effectiveness**

**UNDETECTABLES**

# Key Findings

Ghose, et al 2019

- **Significant positive impact on time spent virally suppressed (<50 copies/ml) found in pre/post evaluation (n=502):**
  - 17% increase post-intervention in mean proportion of all time points undetectable—from 58% to 75%\*
  - 20% increase post-intervention in proportion of clients virally suppressed at all time points assessed—from 26% to 46%\*
  - Point in time viral suppression increased from 68% at baseline to 85%
- **Social/racial disparities in viral suppression found at baseline disappeared post-enrollment**
- **The per person cost of \$68/month falls within well accepted cost-effectiveness thresholds for ART adherence interventions**
- **Qualitative results indicate that the intervention increased ART adherence by:**
  - Attaching worth to viral suppression
  - Increasing motivation to achieve and maintain suppression

\*Paired t test  $p < 0.0001$

## UNDETECTABLES

# **PREPARING FOR THE CITYWIDE SCALE-UP**

**↓ UNDETECTABLES**



# From Pilot Findings to Citywide Scale-up

## IDENTIFY PARTNER(S)

- Housing Works shared pilot findings with NYC DOHMH, who agreed to explore scale-up feasibility and options

December 2014

## CONVENE STAKEHOLDERS

- VLS Consortium convened by NYC DOHMH and Housing Works,
- Activities: *Consult on of key components of the Undetectables adaptation and rollout*

Early 2015

## SECURE FUNDING

- NYC announced ETE funding for a VLS work group led by Housing Works, NYC DOHMH, Amida Care during FY2015
- AND for citywide scale-up of The Undetectables in FY2016

December 2015

## CONTRACT WITH PROVIDERS

- ETE Request for Proposals released by NYC DOHMH
- Program Implementation Awardees: 7
- Technical Assistance Provider Awardee: 1

March – June 2016

## IMPLEMENT PROGRAM

- Contracts began July 2016
- Start-Up Period → Implementation began January 1, 2017

July 2016 – present

# Convene Stakeholders: Work Groups

Work Group	Product(s)	Stakeholders
<b>Steering Committee</b>	Compile strategies for identifying and sustaining funding; brief on progress of other work groups	<ul style="list-style-type: none"> <li>▪ Medical Directors</li> <li>▪ HIV Program Directors (Hospitals and CBOs)</li> <li>▪ Medicaid HIV Special Needs Plan Program Staff</li> <li>▪ Experts in training, curriculum development, social media and marketing, and monitoring and evaluation</li> </ul>
<b>Essential Elements</b>	Guidelines on Best Practices/ Essential Elements of Program and associated evidence base; the <b>Essential Elements Workbook</b>	
<b>Organizational Readiness and Curriculum Development</b>	Organizational Readiness <ul style="list-style-type: none"> <li>▪ <b>Organization Self-Assessment Checklist</b></li> <li>▪ Program Implementation Plan</li> </ul> Curriculum Development <ul style="list-style-type: none"> <li>▪ <b>Training module topics</b></li> <li>▪ Program manual</li> </ul>	
<b>Social Marketing</b>	Adaptation of The Undetectables <b>social marketing materials</b> for use in other settings	
<b>Evaluation</b>	Evaluation Plan for implemented programs	

***Bolded items are available tools***

# IMPLEMENTING THE CITYWIDE SCALE-UP

**↓ UNDETECTABLES**



# Program Overview

- The Undetectables is a multi-level ART adherence support program integrated into HIV medical case management to promote viral suppression
  - Developed and pilot tested by Housing Works, in collaboration with the University of Pennsylvania
- Total ETE funding: \$1.6 million (annually)
- 7 UND program contracts + 1 UND technical assistance contract



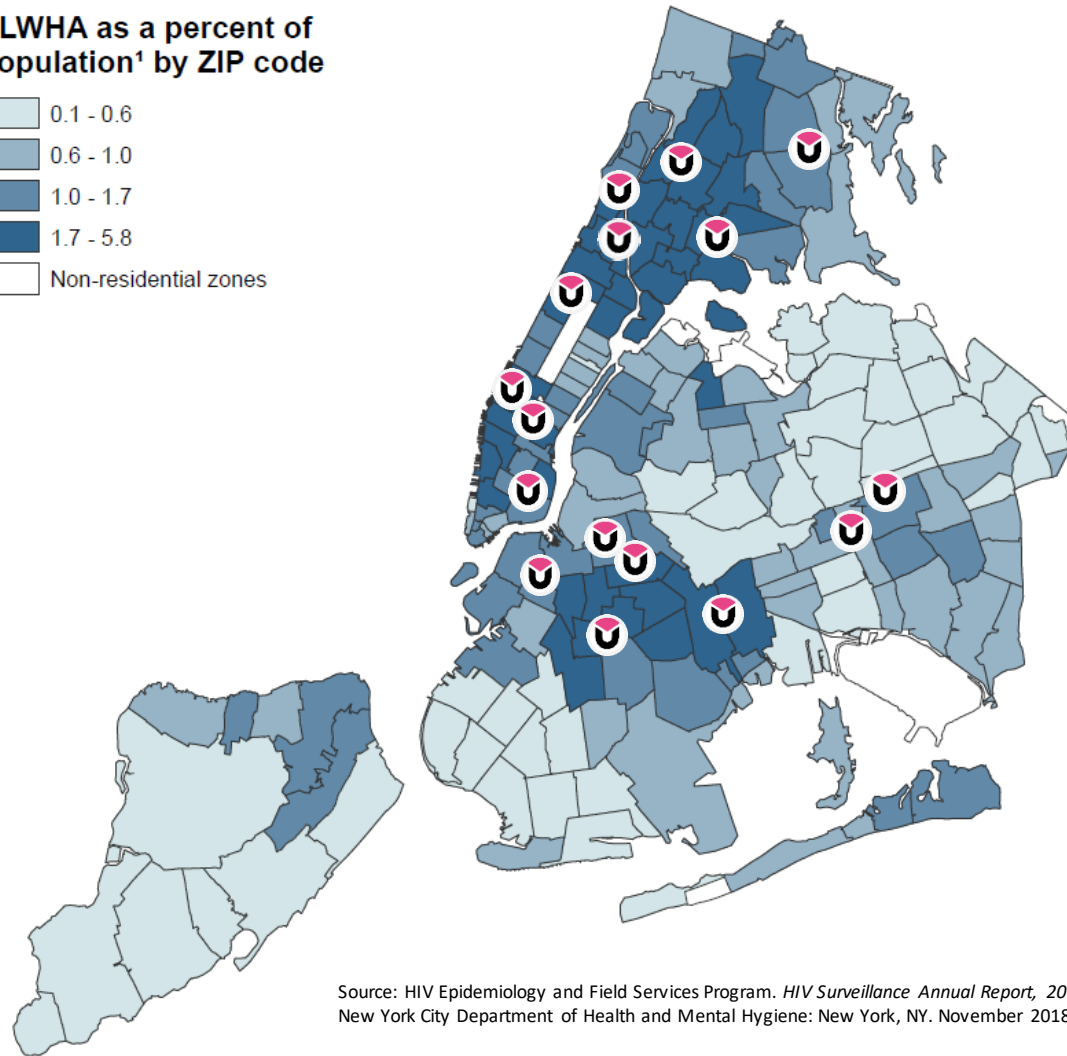
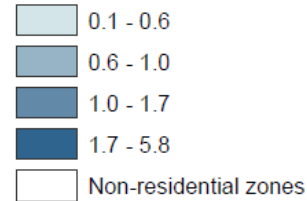
# Implementation

- 6-month start-up (July – Dec 2016)
  - Development of curriculum, customizable marketing materials, and website ([liveundetectable.org](http://liveundetectable.org)); 5-part trainings series; onsite TA
- Implementation began January 1, 2017
  - Ongoing TA, including quarterly roundtable meetings
- 16 program sites (7 agencies)
- 2,361 clients enrolled as of December 31, 2018\*

\*76 clients were enrolled during the start-up phase but remained open until after the implementation start date.

**FIGURE 4.3:** HIV prevalence, NYC 2017

PLWHA as a percent of population<sup>1</sup> by ZIP code

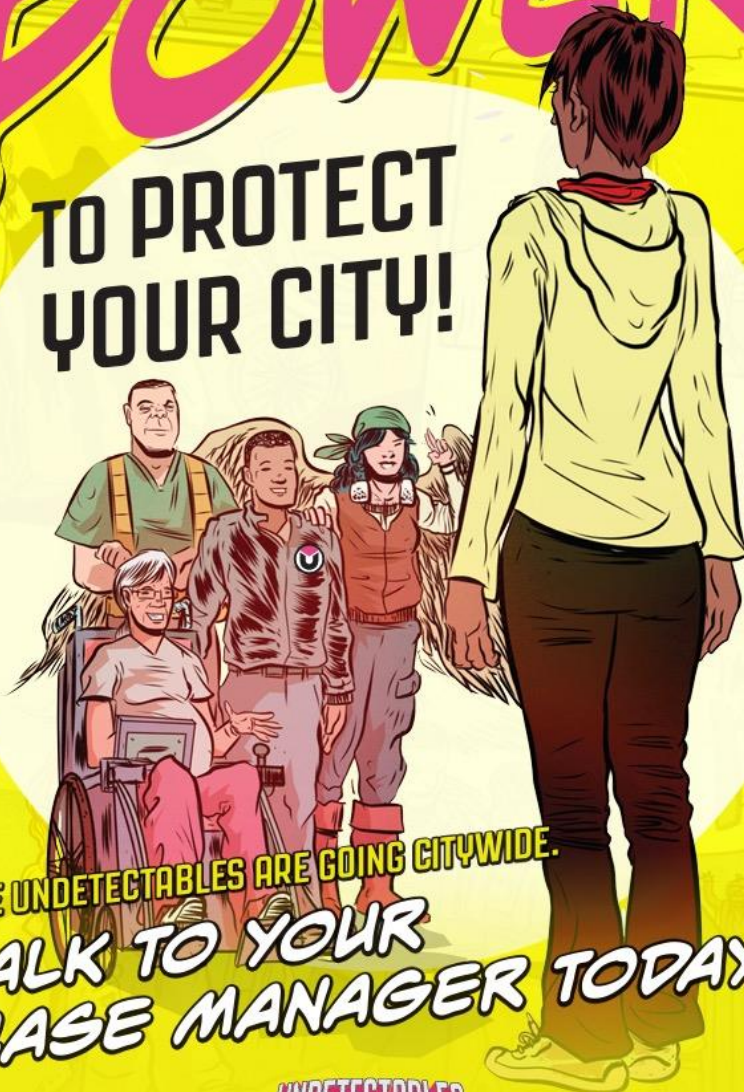


Source: HIV Epidemiology and Field Services Program. *HIV Surveillance Annual Report, 2017*. New York City Department of Health and Mental Hygiene: New York, NY. November 2018.

# UNDETECTABLES

YOU'VE GOT THE  
**POWER**

TO PROTECT  
YOUR CITY!



THE UNDETECTABLES ARE GOING CITYWIDE.

**TALK TO YOUR  
CASE MANAGER TODAY!**

**UNDETECTABLES**

[www.LiveUndetectable.org](http://www.LiveUndetectable.org)

**Citywide Scale-up**  
**UNDETECTABLES**  
Marketing



# Successes

- **Geographic coverage and reaching the intended populations**
- **Scaling up the program model in various settings across NYC**
  - 5 CBOs operating FQHCs and community health centers
  - 1 hospital, and
  - 1 hospital/CBO partnership
- **Identifying essential vs. recommended elements of the model** to allow for integration into multiple existing HIV care management programs
- **High degree of fidelity to essential components of the model**
- **Example of successful collaboration between local government and CBO partner**

**UNDETECTABLES**

# Challenges

- **Integrating the model into a range of existing HIV care management programs**
  - Staff buy-in; streamlining processes; operational challenges
  - Limited care management program capacity
  - “Graduating” from care management
    - Continued enrollment in an approved HIV care management program is required for all UND clients
  - Disparate data reporting systems
- **Advancing *agency-wide* organizational change with limited pilot funding**
- **Program Model vs. Clinical Guidelines re: frequency of virologic monitoring for durably suppressed patients** (NYS DOH AIDS Institute Clinical Guidelines\*)

\* [https://cdn.hivguidelines.org/wp-content/uploads/20181204145446/NYSDOH-AI-Virologic-and-Immunologic-Monitoring-Guideline-PDF\\_12-4-2018\\_HG.pdf](https://cdn.hivguidelines.org/wp-content/uploads/20181204145446/NYSDOH-AI-Virologic-and-Immunologic-Monitoring-Guideline-PDF_12-4-2018_HG.pdf)



# Recommendations for Implementing Financial Incentives in Care Coordination Programs

- **Integrate incentives into HIV care management models**
  - Leverage existing staff and resources
  - Package financial incentive with other evidence-based adherence strategies
- **Deliver program to individuals who experience individual and/or structural barriers to ART adherence and VLS**
  - Do not exclude people who have already achieved VLS
- **Long-term incentives may be needed because many barriers to ART adherence and VLS are chronic and/or structural**
- **Determine incentive structure (e.g., frequency, value) using existing research, clinical experience, and community input**
- **Build organization-wide support to facilitate implementation**

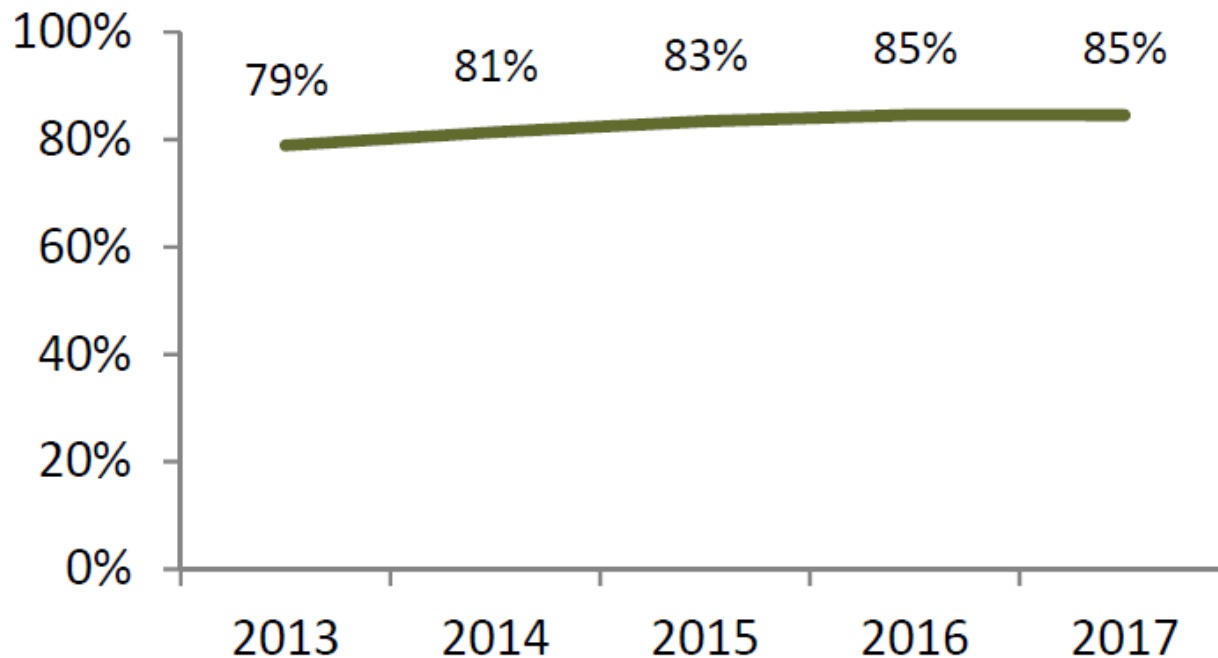
# Continued Dissemination Successes

- Amida Care Medicaid Special Needs Plan  
“Live Your Life Undetectable” program
  - Available to all enrollees
- Community Care of Brooklyn/ Maimonides  
Medical Center Undetectables program
  - 6 Brooklyn Clinical Providers



# Improved VLS in New York City!

**FIGURE 13.2:** Viral suppression<sup>2</sup> among people in HIV medical care,<sup>3</sup> NYC 2013-2017



Source: HIV Epidemiology and Field Services Program. *HIV Surveillance Annual Report, 2017*.  
New York City Department of Health and Mental Hygiene: New York, NY. November 2018.

**THANK YOU!**

**↓ UNDETECTABLES**

# Contact Information



## Housing Works

**Ginny Shubert**

Senior Advisor, Policy & Research

[g.shubert@housingworks.org](mailto:g.shubert@housingworks.org)



## NYC Department of Health and Mental Hygiene

**Graham Harriman**

Director of HIV Care and Treatment

[gharriman@health.nyc.gov](mailto:gharriman@health.nyc.gov)



**LiveUndetectable.org**



# Acknowledgements

## **Housing Works**

Matt Bernardo  
Andrew Greene  
Naomi Harris-Tolson  
Charles King  
Alison Kliegman  
Elizabeth Koke  
Dr. Vaty Poitevien  
Greg Wersching

## **Amida Care**

Carey Brandenburg  
Jerry Ernst  
Doug Wirth

## **New York City Department of Health**

Matthew Feldman  
Gina Gambone  
Kelsey Kepler  
Anna Thomas-Ferraioli

## **University of Pennsylvania**

Toorjo Ghose

# References

- Adamson B, Donnell D, Dimitrov D, et al. Cost-Effectiveness of Financial Incentives for Viral Suppression in HPTN 065. Presented at the Conference on Retroviruses and Opportunistic Infections; February 13-16, 2017; Seattle, WA, Poster Number: 1045. Available at: [http://www.croiconference.org/sites/default/files/posters-2017/1045\\_Adamson.pdf](http://www.croiconference.org/sites/default/files/posters-2017/1045_Adamson.pdf)
- Aidala AA, et al. (2016). Housing Status, Medical Care, and Health Outcomes Among People Living With HIV/AIDS: A Systematic Review. *AJPH*. 106, No. 1: e1–e23.
- Bassett IV, Wilson D, Taaffe J, Freedberg K. Financial incentives to improve progression through the HIV treatment cascade. *Curr Opin HIV AIDS*. 2015; 10(6): 451–463.
- Lima IC, Galvão MTG, Alexandre HO, Lima FET, Araújo TL. Information and communication technologies for adherence to antiretroviral treatment in adults with HIV/AIDS. *Int J Med Inform* 2016;92:54-61.
- El-Sadr WM, Donnell D, Beauchamp G, Hall HI, et al. Financial incentives for linkage to care and viral suppression among HIV-positive patients: a randomized clinical trial (HPTN 065). *JAMA Intern Med*. 2017 Jun 19. Epub ahead of print.
- Farber S, Tate J, Frank C, et al. A study of financial incentives to reduce plasma HIV RNA among patients in care. *AIDS Behav*. 2013; 17(7):2293–300.
- Gambone G, Feldman MF, Thomas-Ferraioli A, Shubert V, Ghose T. Integrating Financial Incentives for Viral Load Suppression into HIV Care Coordination Programs: Considerations for Development and Implementation. *J Pub Hlth Mgmt and Practice*. 2019 Jul 24. Epub ahead of print.
- Ghose T, Shubert V, Poitevien V, Choudhori S, Gross R. Effectiveness of a Viral Load Suppression Intervention for Highly Vulnerable People Living with HIV. *AIDS and Behavior*. 2019. <https://doi.org/10.1007/s10461-019-02509-5>
- Giordano TP, Rodriguez S, Zhang H, Kallen MA, Jibaja-Weiss M, Buscher AL, Ross M. Effect of a clinic-wide social marketing campaign to improve adherence to antiretroviral therapy for HIV infection. *AIDS and Behavior* 2013; 17(1), 104-112.
- Goldie SJ, Paltiel, AD Weinstein MC, et al. Projecting the cost-effectiveness of adherence interventions in persons with human immunodeficiency virus infection. *Am J Med*. 2003 Dec 1;115(8):632-41.

# References

- Greene E, Pack A, Stanton J, et al. "It Makes You Feel Like Someone Cares" acceptability of a financial incentive intervention for HIV viral suppression in the HPTN 065 (TLC-Plus) study. PLoS One. 2017; 12(2):e0170686.
- Gwadz M, Cleland CM, Applegate E, Belki, M, Gandhi M, Salomon N, Pickens I. Behavioral intervention improves treatment outcomes among HIV-infected individuals who have delayed, declined, or discontinued antiretroviral therapy: a randomized controlled trial of a novel intervention. AIDS and Behavior 2015; 19(10), 1801-1817.
- Irvine, MK, Chamberlin SA, Robbins RS, Myers JE, Braunstein SL, Mitts BJ, Harriman GA, Nash D. Improvements in HIV Care Engagement and Viral Load Suppression Following Enrollment in a Comprehensive HIV Care Coordination Program, Clinical Infectious Diseases, Volume 60, Issue 2, 15 January 2015, Pages 298–310, <https://doi.org/10.1093/cid/ciu783>
- Macalino, GE., et al. (2007). A randomized clinical trial of community-based directly observed therapy as an adherence intervention for HAART among substance users. AIDS. 21(11):1473-1477.
- Metsch LR, Feaster DJ, Gooden L, et al. Effect of patient navigation with or without financial incentives on viral suppression among hospitalized patients with HIV infection and substance use: a randomized clinical trial. JAMA. 2016; 316(2):156-70. [PubMed: 27404184]
- Olem, D, Sharp, KM, Taylor, JM, Johnson, MO (2014). Overcoming barriers to HIV treatment adherence: A brief cognitive behavioral intervention for HIV-positive adults on antiretroviral treatment. Cognitive and behavioral practice, 21(2), 206-223.
- Petersen, ML., et al. (2006). Pillbox organizers are associated with improved adherence to HIV antiretroviral therapy and viral suppression: a marginal structural model analysis. Clin Infect Dis. 45(7):908-815.
- Safren, SA, et al. (2012). Cognitive behavioral therapy for adherence and depression (CBT-AD) in HIV-infected injection drug users: a randomized controlled trial. J Consult Clin Psychol., 80(3): 404-15.
- Schackman BR, Finkelstein R, Neukermans CP, et al. The cost of HIV medication adherence support interventions: results of a cross-site evaluation. AIDS Care. 2005; 17(8):927-37. [PubMed: 16265786]
- Simoni JM, Amico KR, Smith L, Nelson K. Antiretroviral Adherence Interventions: Translating Research Findings to the Real World Clinic. Curr HIV/AIDS Rep. 2010 Feb;7(1):44-51. [PubMed: 20425057]

**UNDETECTABLES**

# Ending The Epidemic RFP: Required Activities for Funded Programs

## IMPLEMENTING PROGRAMS (7)

**1. Integrate “VLS for All”**  
into agency/ facility  
organizational culture

**2. Innovative**  
**social marketing campaign**

**3. HIV primary care**  
In-house or partnership

**4. HIV care management**  
Provide all services in the Undetectables Tool  
Kit including quarterly incentive

**5. Data collection**  
Including data entry into NYC DOHMH's  
electronic reporting system

## TECHNICAL ASSISTANCE PROVIDER (1)

Provide intensive technical assistance and training in  
program design and implementation support for agencies  
who are funded for implementation

# Implementation Structure

