LIVE UNDETECTABLE

Scaling Up Viral Suppression Support for Vulnerable Populations

United States Conference on AIDS Washington, DC — September 9, 2017

Ginny Shubert, JD, Housing Works Anna Thomas-Ferraioli, MPH, NYC DOHMH Gina Gambone, MPH, NYC DOHMH Cheyanda Onuoha, MPH, Housing Works





Agenda

- Welcome and Introductions
- The Undetectables Intervention
- Results of a 2-year Demonstration
- Scaling Up The Undetectables
- Thought into Action Activities
- Take it Home!



Who's in the Room?

- Name
- City, State
- Organization
- If you possessed a
 superpower to end AIDS, what would it be and why?

THE UNDETECTABLES INTERVENTION

WHO ARE THE UNDETECTABLES?

FIND OUT SPRING 2014



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

Context: Ending the Epidemic

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



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



End AIDS New York 2020 Community Coalition



UNDETECTABLES

Multiple Goals

- Support clients to achieve and maintain undetectable viral load (≤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 Undetectable equals Untransmittable





Social Marketing

Why become an Undetectable?

- Becoming an Undetectable is becoming a Hero!
- Becoming an Undetectable improves your health, wellbeing, 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 Culture Shift: Together, We Can End AIDS

• Agency-wide buy-in:

- Support from the President/CEO and through each level of senior staff
- Collaborative program evaluation and improvement
- Undetectables Community Advisory Board

• Trainings for all community members:

- Frontline staff (in-person)
- Supportive staff (in-person and online)
- Clients (in-person and online)

• Building and sustaining momentum:

- Launch events
- Rallies
- Celebrations!





UNDETECTABLES

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



INDETECTABLES

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 her team
- Focus on client strengths as well as barriers
- Switch adherence tools as needed

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 ≤ 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

What does recent evidence say about financial incentives?

HPTN 065 Study

• Two-year randomized clinical trial

- 37 primary care sites randomized to financial incentive (FI) and standard of care (SOC)
- \$70 quarterly incentive for viral load <400 copies/ml
- Proportion of virally suppressed patients significantly higher at FI sites compared to SOC sites (El-Sadr 2017)
- Emotional benefits gained by receiving or providing positive reinforcement (Greene 2017)
- Quarterly \$70 incentive was highly cost-effective compared to standard HIV care (Adamson 2017)

UNDETECTABLES

24-MONTH DEMONSTRATION PROJECT EVALUATION



24-month evaluation conducted in collaboration with the University of Pennsylvania

Co-Principal Investigators: **Toorjo Ghose,** UPenn, <u>toorjo@sp2.upenn.edu</u> **Ginny Shubert,** Housing Works, <u>G.Shubert@housingworks.org</u>

Housing Works co-authors:

Charles King Alison Kliegman Andrew Greene Vaty Poitevien Michael Clarke Matt Bernardo

University of Pennsylvania co-authors:

Sambuddha Chaudhuri Megan Stanton

Funded by the **Robin Hood Foundation** <u>http://www.robinhood.org</u>

24-Month Demonstration

Evaluation Sample

- 840 unduplicated individuals voluntarily enrolled
- 636 individuals enrolled at February 29, 2016
- 502 individuals (60% of ever enrolled) met inclusion criteria for evaluation
 - Intent-to-treat
 - At least 2 VL lab results pre- and 2 post-enrollment

24-Month Demonstration

Who participated?

Participant Characteristics	Percentages (n=502)
African American	69.3
Latino/a	21.5
White	6.3
Women	27.2
Transgender	$1.6 \bigcirc $
Alcohol and drug use	68.5
Illicit substance use	63.1
Functionally homeless	88.2
Literally homeless	60.2
Mental illness	51.7

Evaluation Design

- **Community-based participatory approach** in collaboration with academic partners at the University of Pennsylvania
- Study examining: *Feasibility Efficacy* •*Cost-effectiveness*
- Using each participant as his/her own control, assess viral load and cumulative viral exposure pre- and post-enrollment
- Qualitative interviews and focus groups with participants to examine attitudes regarding program efficacy
- Standard methods of cost analysis to assess cost-effectiveness as a function of incremental program costs and medical costs saved through averted downstream infections

24-Month Demonstration Summary of Key Findings

- Point in time rate of VLS (n≤50) increased:
 - 54% at launch (n=441) to 80% at 24 months (n=636)
- Durable VLS significantly increased (n=502):
 - 20% increase post intervention in proportion of clients virally suppressed at all time points
- Qualitative interviews show intervention worked by:
 - Enhancing meaning and worth
 - Increasing motivation and connection to services
- Cost analyses show that:
 - Program costs well within established cost-effectiveness thresholds for ARV adherence interventions

24-Month Demonstration

Point-in-time viral load suppression

Among 441 clients eligible for enrollment at launch: 54% virally suppressed (≤50 copies/ml)

Among 636 clients enrolled at February 29 2016:

80% virally suppressed (≤50 copies/ml) 85% virally suppressed (≤200 copies/ml)

24-Month Demonstration

Durable viral load suppression

Significant impacts on cumulative viral exposure found in pre/post evaluation (n=502) of the 24-month pilot:

- 17% increase post-intervention in proportion of all time points undetectable (≤50 copies/ml)*
- 20% increase post-intervention in proportion of clients virally suppressed at all time points (≤50 copies/ml)*
- Significant social/racial disparities in viral suppression found at baseline disappeared post-enrollment

*p<.0001 (paired t test)

Qualitative Findings

Undetectables increases ARV adherence by:

- Establishing meaning and worth
 - Incentives for staying healthy acknowledge clients' work
 - Intervention provides a mechanism to recognize clients' part in the fight against AIDS
- Increasing motivation
 - Increased understanding of personal and collective benefits
 - Tangible rewards to improve quality of life
 - Establish and support healthy orientation
 - Linkage to toolkit services

Threshold Cost-Effectiveness

- Cost-effectiveness analyses consider intervention costs in light of future program and societal costs such as medical costs saved through averted downstream infections
- ARV adherence supports with moderate efficacy and costs of ≤\$100/month meet conservative cost-effectiveness thresholds for medical interventions*
- We employed standard costing methods to calculate the cost of the Housing Works Undetectables intervention as a function of average enrollment and direct program costs (personnel, incentives & OTPS)
- The fully implemented *Undetectables* intervention had a **per person per year cost of \$812.53, or \$67.71/month**

*Goldie et al., 2003; Schackman et al., 2005



Questions?

UNDETECTABLES

PREPARING FOR THE CITYWIDE SCALE-UP

From Pilot Findings to Citywide Scale-up

IDENTIFY PARTNER(S)



CONVENE STAKEHOLDERS

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

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

CONTRACT WITH PROVIDERS

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

IMPLEMENT PROGRAM

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

July 2016 – present

March – June 2016

Early 2015

Favorable Policy Environment



Convene Stakeholders: Work Groups

Work Group	Product(s)
Steering Committee	Compile strategies for identifying and sustaining funding; brief on progress of other work groups
Essential Elements	Guidelines on Best Practices/ Essential Elements of Program and associated evidence base; the Essential Elements Workbook
Organizational Readiness and Curriculum Development	Organizational Readiness Organization Self-Assessment Checklist Program Implementation Plan Curriculum Development Training module topics Program manual
Social Marketing	Adaptation of The Undetectables social marketing materials for use in other settings
Evaluation	Evaluation Plan for implemented programs

Bolded items are available tools

Stakeholders

- Medical Directors
- HIV Program Directors
 - Hospital
 - CBOs
- Medicaid HIV SNP Program Staff
- Content Experts
 - Training and curriculum development
 - Social marketing

Consultation with Pilot Implementation Team

- Early in the process, DOHMH attended a consultation with Housing Works clinical and HIV care management staff to learn about mechanics of program model implementation
 - Case conferencing with clinician, care manager, and patient present
 - Incentive distribution
 - Challenges

Essential Elements: Mapping Interventions to the Evidence

- For each element considered, the group discussed
 - The Housing Works implementation approach
 - Adaptability of the approach to other settings
 - Questions and concerns about the model
 - Applicable findings in the literature
- Example: Case Conferencing
Essential Elements: Evidence-based Strategies

- Multi-level approach
 - Bassett et al., 2015
- Sustained support
 - Metsch et al., 2016; Simoni et al., 2010
- Resiliency-based social marketing
 - Giordano et al., 2013
- Care coordination
 - Irvine et al., 2015
- Financial incentives
 - El-Sadr et al., 2017

- Address subsistence needs
 - Aidala et al., 2016
- Motivational interviewing
 - Gwadz et al., 2015
- Cognitive behavioral therapy
 - Olem et al., 2014; Safren et al., 2012

Adherence devices

- de Lima et al., 2016; Petersen et al., 2006
- DOT
 - Macalino et al., 2007

Organizational Readiness and Curriculum Development

- Built upon the work of the Essential Elements Work Group
- Build a VLS Initiative curriculum that:
 - Retains the essential elements of The Undetectables
 - Evidence-based
 - Ongoing evaluation
 - Strong social marketing component

– Can be scaled to work in a variety of settings

- Modular structure
- Targeted to clients/ patients who can benefit most

Is sustainable

- Fiscally sustainable
- Well-integrated with the organizational structure

World AIDS Day 2015

 Mayor DiBlasio announced \$23 million in local funds for Ending the Epidemic programs, which included \$1.9M for the scale-up of The Undetectables

UNDETECTABLES

IMPLEMENTING THE CITYWIDE SCALE-UP

Ending The Epidemic RFP: Required Activities for Funded Programs



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

DOHMH Program Support

Support Contracted Undetectables TA Provider in assessment of needs among contracted programs for training and implementation support resources

Coordinate Undetectables/VLS Consortium in collaboration with the Undetectables Learning Lab

Support ongoing evaluation of the program model



Contracted Undetectables TA Provider (1)

With DOHMH program support, assess needs among contracted programs and develop Program Implementation Plan with each program

Participate in the Undetectables/VLS Consortium Develop Undetectables curriculum based on contracted program assessment findings

Contracted Undetectables Programs (7)

Collaborate with contracted Undetectables TA Provider to identify program needs and establish implementation plan

Participate in the Undetectables/VLS Consortium Implement Undetectables model and distribute incentives to program participants for Viral Load Suppression

Citywide Scale-up Program Settings and Reach

- 7 program contracts and 1 technical assistance contract
 - all funded for 3 years (2016-2019)

• Funded agency settings:

- 4 CBOs operating Federally Qualified Health Centers
- 1 CBO providing in-house primary care services
- 1 CBO in partnership with hospital
- 1 Hospital
- Year 1 total # of clients enrolled: 1052
- Year 2 projected # of clients served: 2065
 - 200 to 300 clients per agency
 - Exception: Housing Works to serve 650

YOU'VE GOT THE

Citywide Scale-up UNDETECTABLES Marketing

U

TO PROTECT YOUR CITY!

THE UNDETENTION OF A CONTACT OF

UNDETECTABLES

www.LiveUndetectable.org

FIGURE 4.3: HIV prevalence, NYC 2015





- Final questions
- Complete evaluation form!



THANK YOU!

Contact Information

Health

Housing Works

Ginny Shubert Senior Advisor, Policy & Research g.shubert@housingworks.org

NYC Department of Health and Mental Hygiene

Anna Thomas-Ferraioli

Director of Medicaid and Health Reform Policy

athomas8@health.nyc.gov



Acknowledgements

Housing Works

Charles King Andrew Greene Greg Wersching Elizabeth Koke Alison Kliegman Matt Bernardo

Amida Care Doug Wirth Jerry Ernst Lee Garr Jason Lippman

NYC DOHMH

Bisrat Abraham Graham Harriman Matthew Feldman Kelsey Kepler

Community Stakeholders

Janet Goldberg, The Brooklyn Hospital Center Shruti Ramachandran, Mount Sinai

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
- 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 HIVpositive 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.
- 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.
- 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.

References

- 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]



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

www.LiveUndetectable.org