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HIV CARE & TREATMENT

Integrating a Multi-level ART Adherence Program into HIV Care Management: Considerations for Development, Implementation, Expansion

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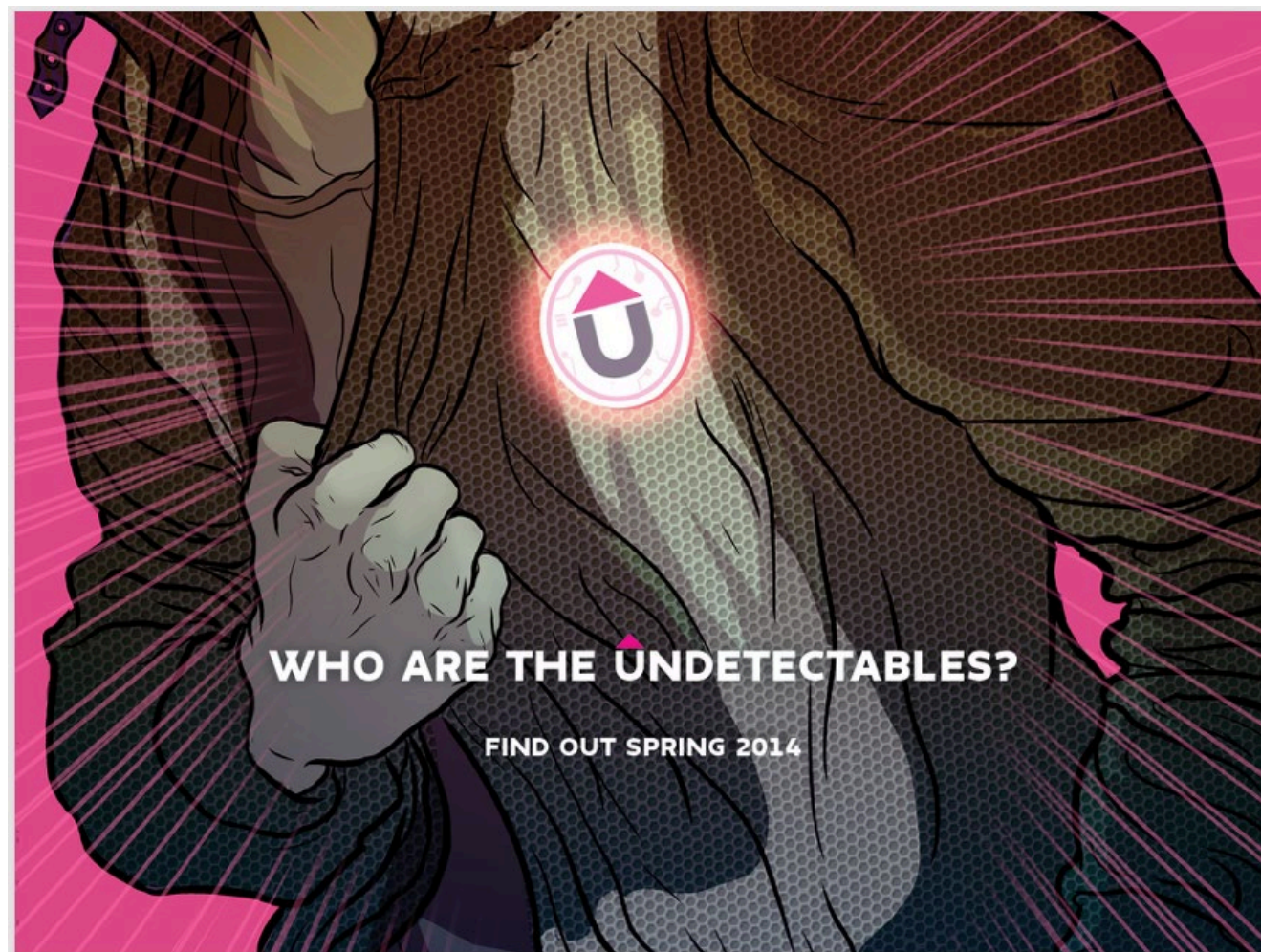
Disclosures



- Gina Gambone and Anna Thomas-Ferraioli have no relevant financial or non-financial interests to disclose
- Commercial support was not received for this activity

- **Program Background: The Undetectables Viral Load Suppression Program**
- **Scaling up The Undetectables in New York City**
- **Integrating Financial Incentives into HIV Care Management Service Delivery**
 - What existing research tells us and how key considerations from the literature were applied to the development and implementation of The Undetectables
- **Funding The Undetectables**
 - Local NYC funding
 - Leveraging Medicaid and other insurance programs
 - Ryan White HIV/AIDS Program funding options
- **Q&A**

Program Background



The Undetectables Demonstration Project



PROJECT OVERVIEW

- A project by **Housing Works**, a NYC community-based organization
- 24-month pilot launched March 2014
- Funded by the **Robin Hood Foundation**
- Developed with the **University of Pennsylvania**
- Aim: To empower clients facing barriers to health and adherence
 - E.g., poverty, housing and food insecurity, behavioral health issues, history of trauma, mental health symptoms)

The Undetectables Demonstration Project



Client-centered model of integrated care that employs:

- 1) Anti-stigma SOCIAL MARKETING**
- 2) AGENCY CULTURE CHANGE**
- 3) TOOLKIT of evidence-based ART support strategies**

The Undetectables Demonstration Project



PROJECT GOALS

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

The Undetectables Demonstration Project



SOCIAL MARKETING

Why become an Undetectable?

Becoming an Undetectable...

- ...is becoming a Hero!
- ...improves your health and well-being!
- ...means you will not transmit HIV to sexual partners!
- ...helps to end the HIV epidemic!

The Undetectables Demonstration Project



AGENCY CULTURE CHANGE: Together, We Can End HIV/AIDS

Agency-wide buy-in: *How?*

- Support from senior staff as agency-wide priority
- Information and training for all staff and clients
- Social marketing to engage staff and clients
- Collaborative program evaluation and improvement
- The Undetectables Community Advisory Board
- Building and sustaining momentum through accountability & celebration!





The Undetectables Demonstration Project



www.LiveUndetectable.org

WHAT'S IN THE UNDETECTABLES TOOLKIT?

Client-centered ART adherence planning and support

-  Integrated case conferences with health care provider and case manager *and client*
-  Motivational interviewing-based adherence counseling
-  Behavioral health assessment/referral
-  Assistance to meet subsistence needs

Adherence devices/ medication reminders

Cognitive behavioral therapy-based adherence support groups

Peer support

Directly observed therapy (DOT)

- Formal and informal

\$100 gift card incentive

- For lab result showing undetectable viral load (<50 copies/mL)
- Quarterly (up to four per year)

KEY FINDINGS FROM 24-MONTH DEMONSTRATION PROJECT

Significant positive impact on time spent virally suppressed (<200 copies/mL) found in pre/post evaluation (n=502):

- **15% increase** post-intervention in mean proportion of all time points undetectable—from 67% to 82% (17% increase using <50 copies/mL)
- **23% increase** post-intervention in proportion of clients virally suppressed at all time points assessed—from 39% to 62% (20% increase using <50 copies/mL)
- Point-in-time viral suppression increased **from 68% at baseline to 85%**

*Evaluation by the University of Pennsylvania

(Ghose et al., 2019)

Demonstration Project Evaluation*

(Qualitative Findings)



Qualitative results indicate that the intervention **increased ART adherence** by:

1) **Attaching worth** to viral suppression

- Acknowledgement of their work to stay healthy and their role in the fight to end HIV/AIDS
- Transformation of sense-of-self from objects of medical intervention to agents of their own care
- New connection to the history of HIV activism

2) **Increasing motivation** to achieve and maintain suppression

- Increased understanding of personal and collective benefits of VLS
- Tangible financial benefits to improve lives
- Improved linkage to necessary services

*Evaluation by the University of Pennsylvania

(Ghose et al., 2019)

NYS Ending the Epidemic Blueprint



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

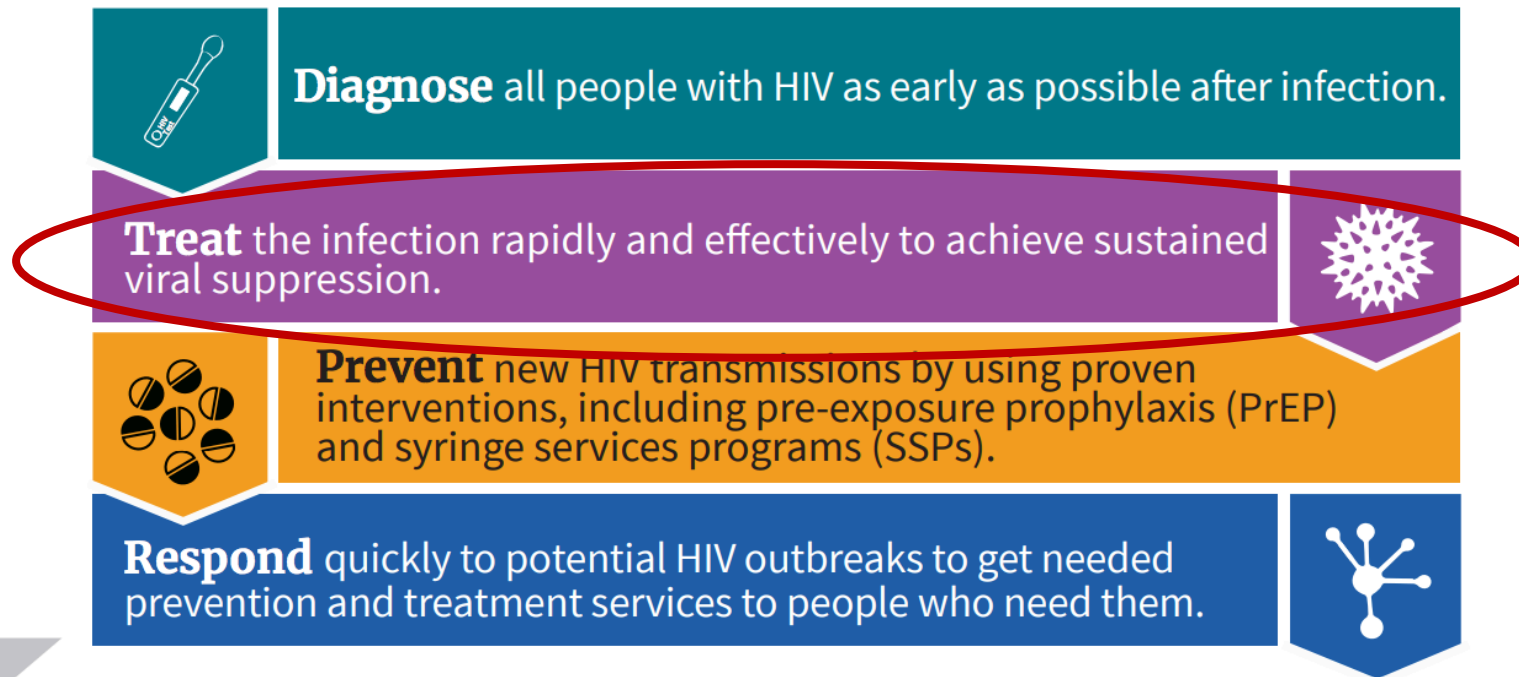
Facilitate access to Pre-Exposure Prophylaxis (PrEP) and non-occupational post-exposure prophylaxis (nPEP) for high risk persons to keep them HIV-negative

Recommendation BP6: *The use of incentives for VLS performance helps to keep attention on achieving this key goal. For patients, incentives such as gift cards or non-cash rewards could be provided for adherence milestones, keeping appointments, achieving or sustaining an undetectable viral load.*

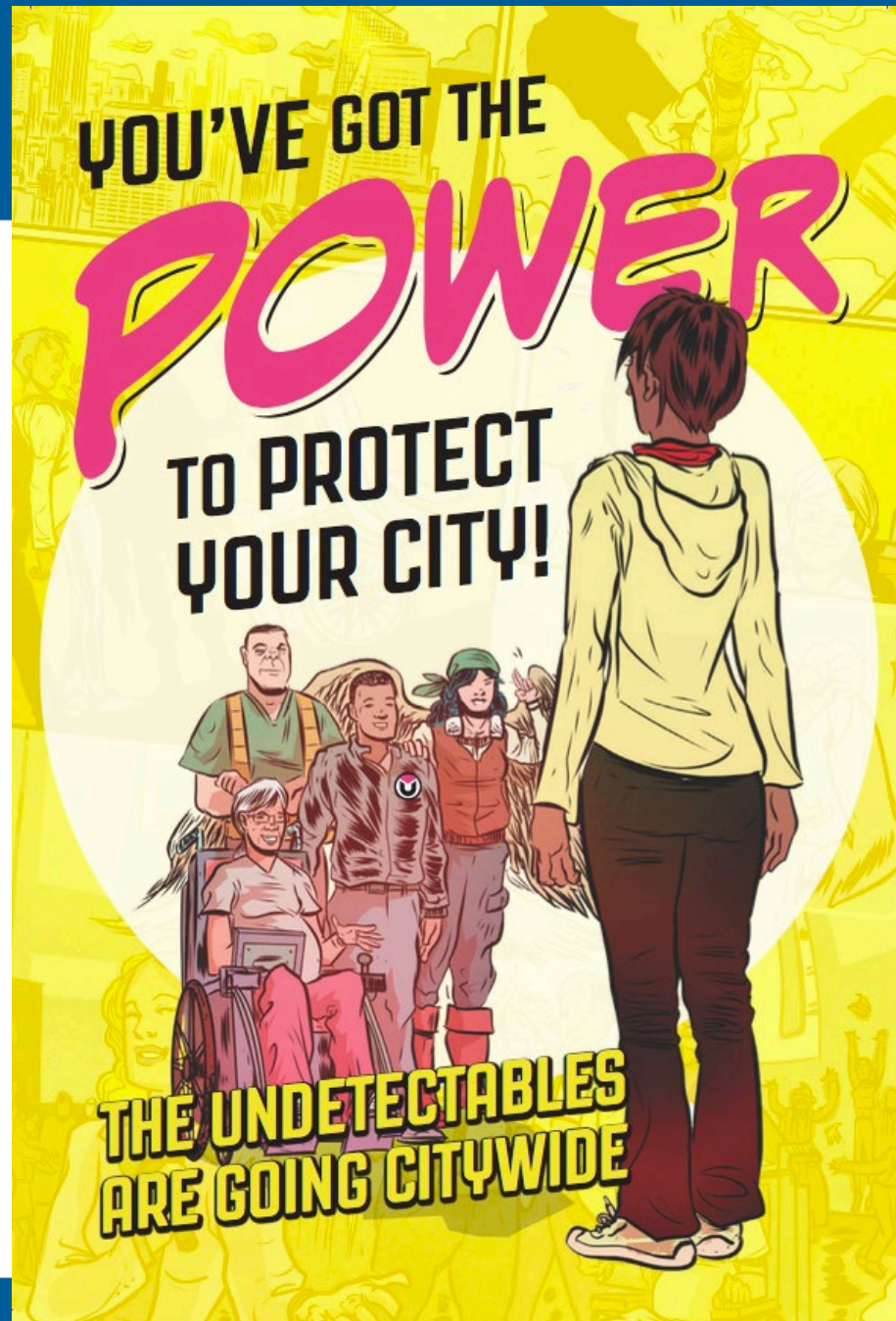
Federal Ending the HIV Epidemic Plan

GOAL:

reaching
75%
reduction
in new HIV
infections
by 2025
and at least
90%
reduction
by 2030.



The Undetectables
is a strategy to
TREAT and support
people to achieve
and maintain viral
load suppression



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Scaling Up in New York City

From Pilot Findings to City-wide Scale-up



IDENTIFY PARTNER(S)

- Housing Works shared pilot findings with NYC Health Dept, who agreed to explore scale-up feasibility

December 2014

CONVENE STAKEHOLDERS

- VLS Learning Lab Consortium convened by NYC Health Dept and Housing Works
- Activities: *Consult on key components of The Undetectables adaptation and rollout*

Early 2015

SECURE FUNDING

- NYC announced FY2015 ETE funding for VLS work group led by Housing Works, NYC Health Dept, Amida Care
- AND FY2016 ETE funding for the city-side scale-up of The Undetectables

December 2015

CONTRACT WITH PROVIDERS

- Ending the Epidemic Request for Proposals released by NYC Health Dept
- Program Implementation Awards: 7 AND Technical Assistance Provider Award: 1

March
– June 2016

IMPLEMENT PROGRAM

- Contracts began July 2016 → 6-month Start-up Period → Implementation began January 1, 2017

July 2016
– present

Convene Stakeholders: Work Groups



WORK GROUP	PRODUCT(S)	STAKEHOLDERS
Steering Committee	Compile strategies for identifying and sustaining funding; brief on progress of other work groups	Medical directors
Essential Elements	Guidelines on Best Practices/ Essential Elements of Program and associated evidence base; the Essential Elements Workbook	HIV program directors (hospitals, community health centers, and CBOs)
Organizational Readiness and Curriculum Development	Organizational Readiness <ul style="list-style-type: none"> ▪ Organizational Readiness Checklist ▪ Program Implementation Plan Curriculum Development <ul style="list-style-type: none"> ▪ Training module topics ▪ Program manual 	Medicaid HIV Special Needs Plan program staff
Social Marketing	Adaptation of The Undetectables social marketing materials for use in other settings	Experts in training, curriculum development, social media and marketing, and monitoring and evaluation
Evaluation	Evaluation Plan for implemented programs	

Organizational Readiness Checklist

- HIV Primary Care Capacity
- HIV Care Management Capacity
- Fiscal Capacity
- Experience Serving Target Populations
- In-house and Referral Resources



- Internal Processes
- Client Engagement and Social Marketing
- Data Systems
- Quality Management Capacity

Integrating Financial Incentives into HIV Care Management Service Delivery

(Gambone et al., 2019)

Behavioral Economics



- Integrates principles of psychology and economics
- Decision-making is not consistently rational; it is influenced by beliefs, emotions, competing demands, and other contextual factors
- Basic principles of behavior reinforcement
- Financial incentives provide a certain and near-immediate reward

(Bassett et al., 2015; Gálarraga et al., 2013)

Efficacy and Effectiveness of Financial Incentives



- Contingency management for alcohol and drug treatment¹
- Health promoting behaviors, including smoking cessation, weight loss, attendance at clinical visits, and adherence to medication²
- ART adherence and viral suppression³

1. Benishek et al., 2014; Gálarraga et al., 2013; Haug & Sorensen, 2006; Higgins et al., 1999; Petry 2010; Petry et al., 2012; Prendergast et al., 2006

2. Bassett et al., 2015; DeFulio & Silverman, 2012; Gálarraga et al., 2013; Giles et al., 2014; Giuffrida et al., 1997; Kane et al., 2004; Mantzari et al., 2015; Petry et al., 2012; Volpp et al., 2008; Volpp et al., 2009

3. El-Sadr et al., 2017; El-Sadr et al., 2015; Farber et al., 2013; Foster et al., 2013; Ghose et al., 2019; Javanbakht et al., 2006; Metsch et al., 2016; Rigsby et al., 2000; Rosen et al., 2007; Silverman et al., 2019; Sorensen et al., 2007

- **Cost-effectiveness studies account for future program and societal costs of poor adherence**
 - Estimates indicate adherence programs with moderate efficacy costing $\leq \$100/\text{month}$ meet cost-effectiveness ratios below a commonly accepted conservative threshold for medical interventions in the U.S.⁴
- **Adamson et al., 2017 (HPTN 065 Study)**
 - Findings: quarterly \$70 incentive for VLS was highly cost-effective compared to standard HIV care
- **Farber et al., 2013**
 - Findings: quarterly \$100 incentive for VLS was cost-effective using extremely conservative modeling

4. Threshold: \$50,000 per quality-adjusted life year (Goldie et al., 2003; Schackman et al., 2005)

What does the literature tell us about **financial incentives**, and how does it apply to **The Undetectables** citywide scale-up?

Multi-level Approach

The literature tells us...

- **Financial incentives (FIs) should be one component of a multi-level approach**
- **Combine FIs with existing evidence-based adherence support strategies**
 - Care coordination, patient navigation
 - Wrap-around services
 - Patient education, skills training
 - Motivational Interviewing-based adherence counseling
 - Reminder calls/text messages
 - Pillboxes
 - Directly observed therapy

The Undetectables...

- **Multiple levels:**
 - Social marketing campaign
 - Organizational culture change
 - Tool kit of evidence-based ART adherence support tools, including financial incentives
- **Citywide scale-up:**
 - The Undetectables is integrated into existing HIV care management models that provide a range of evidence-based adherence strategies



(Bassett et al., 2015; El-Sadr et al., 2017; El-Sadr et al., 2015; Farber et al., 2013; Foster et al., 2013; Gálarraga et al., 2013; Ghose et al., 2019; Lynagh et al., 2013; Javanbakht et al., 2006; Metsch et al., 2016; Rigsby et al., 2000; Rosen et al., 2007; Sorensen et al., 2007)

Target Population and Patient Eligibility



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The literature tells us...

- **FIs are more likely to be effective with vulnerable populations**
- **Restricting participation to only individuals with detectable VL could have negative consequences**
 - Seen as penalizing virally suppressed clients
 - Inadvertently encourage virally suppressed clients to reduce adherence in order to qualify

The Undetectables...

- **Enrolls PLWH who face adherence barriers**
 - Including: unstable housing, poverty, food insecurity, current or history of substance use, mental health symptoms
- **Already suppressed clients cannot be excluded**
- **Citywide scale-up requires enrollment in an approved HIV care management**



(Adams et al., 2014; El-Sadr et al., 2017; Farber et al., 2013; Lynagh et al., 2013; Mantzari et al., 2015; Sorensen et al., 2007)

Incentive Structure

The literature tells us...

- FIs can target behaviors and/or clinical outcomes
- When determining FI value, consider SES of target population and consult community
- Demonstrated effectiveness when targeting VS and/or ART adherence:
 - quarterly \$100 cash
 - quarterly \$70 gift card
 - monthly \$20 cash
 - weekly cash (\$2-\$10/dose, escalating)

The Undetectables...

- Targets clinical outcome: VL <200 copies/mL
- \$100: based on research, clinical experience, and community input
- Unrestricted gift card
- Quarterly



(Adams et al., 2014; Adamson et al., 2017; DeFulio & Silverman, 2012; El-Sadr et al., 2017; Farber et al., 2013; Gálarraga et al., 2013; Ghose et al., 2019; Haug & Sorensen, 2006; Javanbakht et al., 2006; Lynagh et al., 2013; Petry et al., 2012; Rigsby et al., 2000; Shackman et al., 2005; Sorensen et al., 2007)

Intervention Duration and Sustainability of Effect

The literature tells us...

- **FIs are effective during the intervention but benefits tend to fade after FI is removed**
 - This is common across health behavior change research → *maintenance after an intervention ends is rare*
- **Long-term FI interventions needed to sustain effects and achieve durable VS**

The Undetectables...

- **Citywide scale-up originally funded by ETE for 3-year period (2016-2019) with no cap on length of client enrollment**
 - Disenrollment policy: if client misses 2 consecutive quarterly labs, client is disenrolled (but can re-enroll at any time)
- **ETE funding extended another 2 years**



(DeFulio & Silverman, 2012; Mantzari et al., 2015; Metsch et al., 2016; Feldman et al., 2014; Giles et al., 2014; Kwasnicka et al., 2016; Metsch et al., 2016; Petry et al., 2012; Rigsby et al., 2000; Rosen et al., 2007; Simoni et al., 2013; Sorensen et al., 2007)

Feasibility and Acceptability

The literature tells us...

- **Implementation concerns include:**
 - Logistical and administrative challenges
 - Increased clinic volume
 - Required frequency of lab work
 - Ethical concerns
- **Highly acceptable to patients and clinic staff**
 - Emotional benefits gained by receiving or providing positive reinforcement

The Undetectables...




- **Housing Works pilot found:**
 - Implementation to be highly feasible; and
 - Use of FIs to be highly acceptable to virtually all patients and staff
- **Citywide scale-up:**
 - Housing Works provides TA to funded agencies to address implementation concerns
 - Fidelity assessment indicates implementation is highly feasible

(Anderson et al., 2017; Farber et al., 2013; Ghose et al., 2019; Greene et al., 2017)

The literature tells us...

- Provision of FIs to patients has been increasing in health care settings
- **Despite body of evidence, skepticism and opposition persist**
 - “Incentives decrease intrinsic motivation”
 - “Incentives increase substance use”
 - “Incentives are coercive”
 - “Why pay patients to do what’s in their best interest?”
- **Proponents: Consider potential health and economic benefits to patients and society**

The Undetectables...

- 
- **Aligns with NY State’s Ending the Epidemic Blueprint**
 - Recommendation BP6: Incentivize performance (for both providers and patients)
 - **Qualitative evaluation of Housing Works’ pilot found clients:**
 - Felt valued and appreciated
 - Expressed sense of pride being part of larger effort to end the epidemic
 - Used gift card to pay bills, buy necessities

Recommendations for Implementing Financial Incentives in HIV Care Management



- **Integrate financial incentives into HIV care management models**
 - Leverage existing HIV care management program staff and resources
 - Package financial incentive with other client-centered, 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 financial incentives may be needed because many barriers to ART adherence and VLS are chronic and/or structural**
- **Determine financial incentive structure (e.g., frequency, value) using existing research, clinical experience, and community input**
- **Build organization-wide support early to facilitate implementation**

(Gambone et al., 2019)

Funding The Undetectables

NYC Funding Experience



The New York City scale-up of The Undetectables leveraged multiple funding streams:

- New York City Ending the Epidemic funding
- New York State Medicaid Waiver funding
 - Delivery System Reform Incentive Payment Program Performing Provider Systems (DSRIP)*
 - Medicaid Managed Care Special Needs Health Plan (SNP)

ETE-Funded Agencies



ETE-Funded Implementation



- **The Undetectables program model integrated into existing HIV care management programs, including:**
 - RWPA Care Coordination
 - RWPB Retention and Adherence Program
 - Medicaid Health Homes
 - Adult Day Health Care Management
- **Start-up and ongoing training and technical assistance delivered by Housing Works**

ETE-Funded Implementation



From 1/1/17 – 12/31/19:
2,893 clients enrolled
in The Undetectables

Characteristic	% of Participants
Gender	65.7% Cisgender Men; 26.8% Cisgender Women; 6.0% Transgender Women
Race/ Ethnicity	57.5% Black; 31.6% Latinx
Age	56.5% ages 40-64 years
Barriers to adherence at enrollment	83.0% Income below FPL; 39.3% Food insufficiency; 31.1% Unstable housing; 23.8% Mental health symptoms; 12.8% Recent substance use

ETE-Funded Implementation



VIRAL SUPPRESSION OUTCOMES

- As of December 31, 2019, among enrolled clients engaged in care* (n=2,311), **88.7%** were **virally suppressed**
- Among clients enrolled the entire 2018-19 grant year (n=1,185), **76.7%** demonstrated **evidence of durable viral suppression****

*Engaged in care: having ≥ 2 viral load labs at least 90 days apart during a period of interest

**Evidence of durable viral load suppression: having no unsuppressed viral loads within a 12-month period

Medicaid Waiver-Funded Expansion



November 2017: **Community Care of Brooklyn (CCB)** replicated The Undetectables in Brooklyn

- Supported through the DSRIP Program
- 3 hospital sites and 3 FQHC sites
- Over 940 clients enrolled as of August 31, 2019



November 2018: **Amida Care Medicaid Special Needs Plan** announced their “Live Your Life Undetectable” VLS program

- Features key elements of The Undetectables
- Offered to all eligible Amida Care members
- 2,783 clients enrolled as of June 30, 2020



Leveraging Medicaid and Other Payers: Advocacy Makes All the Difference



- **Federal Medicaid waiver funding**
 - Several states have been granted 1115 and other waiver types
 - In New York, advocates from around the State requested that the DSRIP waiver include HIV activities, specifically calling out those strategies detailed in the State Blueprint to End AIDS. Many jurisdictions have similar plans, which can be used as advocacy tools.
- **Permission from State administrators for Medicaid Managed Care plans**
 - Medicaid Special Needs Plans, CBOs, and hospital leadership, organized as the DSRIP HIV Coalition, advocated with New York State for permission to use Medicaid Managed Care dollars for financial incentives for viral load suppression
 - Medicaid Managed Care Plans in New York State may opt to use financial incentives for viral load suppression, but they must currently use administrative dollars.

Funding The Undetectables via Ryan White Programs



- Some RWPA, RWPB, and RWPC could potentially integrate The Undetectables into existing HIV care management models. Potential additional costs* include:
 - Training
 - Social marketing materials
 - Gift cards (for the financial incentive)
 - A partial FTE to manage program start-up and integration into existing services
- Program planners will need to engage their community planning bodies (where applicable) to identify funding/ reprioritize program dollars to enhance funding to the service category in which the program sits

*See Slide 23 for cost-effectiveness findings

Integrating The Undetectables into a Ryan White Program



- Care managers in the previously existing programs would need to:
 - Attend trainings
 - Integrate any additional Undetectables toolkit components into their programs (either through direct provision or referral)
 - Conduct case conferences with HIV primary care providers and the client, if this is not the current practice
- Organizational culture change: agency-wide commitment to support all clients to achieve viral load suppression. All program staff will need to:
 - Attend at least one training to ensure familiarity with program concepts
 - Display and share Undetectables program materials
 - Encourage and support program participants as is appropriate for the staff member's role and responsibilities.

Questions?

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ETE-funded Agencies

- The Alliance for Positive Change
- Brightpoint Health, a member of Hudson River Healthcare
- Community Healthcare Network
- Harlem United
- Housing Works
- Ryan Health
- Wyckoff Heights Medical Center

Contact Us



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to learn more

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