HIV Home Test Giveaway: Rapid Distribution among Men and Transgender People who have Sex with Men (MTSM), New York City 2015

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Innovations in HIV Testing Strategies and Technologies
HIV and Testing in NYC

- NYC has one of the largest HIV epidemics in the US\(^1\)
  - 2,718 new HIV diagnoses in 2014
  - More than 119,000 people living with HIV/AIDS

- High burden among men who have sex with men (MSM) and transgender individuals
  - In NYC, MSM were 59% of new dx in 2014 and 74% of new dx among men\(^1\)
  - Among 3.3 million HIV testing events reported to CDC in 2013, highest percentages of new HIV dx were among transgender persons\(^2\)

- HIV testing rates in NYC are high, but still room for improvement
  - 64% of adult New Yorkers reported ever testing for HIV\(^3\)
  - Among surveyed NYC MSM, 84% reported testing for HIV in past year\(^4\)
  - In 2015 serosurvey at Bronx hospital, 5.6% HIV-positive and unaware of their status (14% in 2010)\(^5\)

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\(^1\)NYC Department of Health and Mental Hygiene (DOHMH). HIV Surveillance Annual Report, 2014
\(^2\)http://www.cdc.gov/hiv/group/gender/transgender; \(^3\)NYC DOHMH Community Health Survey, 2014; \(^4\)NYC DOHMH Sexual Health Survey, Spring 2015; \(^5\)https://www1.nyc.gov/site/doh/about/press/pr2016/pr052-16.page
HIV Home Test

- US FDA approved in July 2012
- Over-the-counter, rapid HIV self-test for personal use
- May help address barriers to testing, including concerns about privacy, stigma and inconvenience of testing

Potential barriers to home testing:
- Price: ~$40
- Availability: sold at approximately 1 in 4 NYC pharmacies

Various HIV home test programs have been conducted
- Los Angeles, Washington State, London (home specimen)

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Home Test Giveaway Pilot

- **Goal:** Distribute 2,000 HIV in-home test kits to men and transgender individuals who have sex with men (MTSM)
  - Tests sent at no cost, through the mail
  - Conducted entirely online – recruitment, eligibility assessment, kit order
Recruitment

Recruitment: Dating apps and websites
Flow for Participants

Views campaign ads and clicks link to eligibility survey

Answers basic eligibility questions (online questionnaire)

If eligible

Receives “discount code” in email and directed to manufacturer's website to place order

Receives test package by mail

Receives follow-up survey by email

If ineligible

Directed to NYC HIV prevention and care resource websites
Eligibility Survey and Code Redemption

- Eligibility assessed via online survey
  - Men and transgender individuals
  - Sex with a man in past 12 months
  - Residing in NYC (by ZIP)
  - Aged 18 and older
  - No previous HIV diagnosis

- Data collected also included
  - Race/ethnicity
  - Time since last HIV test

- Eligible participants were emailed codes (2500 available)

- Directed to manufacturer’s website to redeem the code within 2 months of launch
The Package

The Kit

Testing Insert

PrEP and PEP

The OraQuick® In-Home HIV Test

BE SURE, BE SAFE, AND GET TESTED FREQUENTLY

PrEP and PEP are daily pills that can prevent HIV as long as you take them correctly. Consult a provider for additional protection against HIV most usually transmitted infections and unintended pregnancy.

Emergency PEP to prevent HIV

Daily PrEP to prevent HIV

If you are HIV-negative and think you were exposed to HIV, immediately go to a clinic or emergency room and ask for PEP (Post-exposure Prophylaxis).

PEP is an emergency medicine you take right away after you are exposed to HIV.

PEP can stop HIV if started within 72 hours of exposure. You can take PEP for 28 days.

More insurance plans, including Medicaid, offer PEP. Coverage may not be available if you are pregnant.

Call 1-800-MOPHARM for more information.
Evaluation of Kit Distribution

- Evaluation of kit distribution included examining:
  - Flow and timing of pilot activities
  - Characteristics of eligible participants
  - Redemption rates by participants’ characteristics

- Data (and data sources) included:
  - Ad impressions and click-throughs (ad buyer)
  - Participant demographics, testing history (eligibility survey)
  - Codes redeemed (manufacture’s website)
Participant characteristics examined included:

- Age, years
- Gender identity
- Race/ethnicity
- Time since last HIV test
- Neighborhood poverty rate (2010-2014) by ZIP, dichotomized:
  - Low: <20% of residents below federal poverty level (FPL)
  - High: ≥20% of residents below FPL
- Neighborhood HIV diagnosis rate (2013) by ZIP, dichotomized:
  - Lower three quartiles
  - Top quartile

Significant differences were tested by chi-square (p<0.05)
Pilot Flow

Estimated ad impressions
N ~ 6,000,000

Click-through to eligibility survey
N = 39,605

Participants screened for eligibility
N = 3,359

Eligible
74% (2,497/3,359)

Ineligible
26% (862/3,359)

Reasons for ineligibility*
Under 18 years of age (1%)
Cisgender woman (4%)
Diagnosed with HIV (11%)
No recent sex with a man (14%)
Lived outside of NYC (78%)

*Criteria not mutually exclusive
Pilot Timing

- Pilot recruitment concluded within 23 days
- Participation occurred throughout the day
## Characteristics of Eligible Participants (N=2,497)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age, years</strong></td>
<td></td>
</tr>
<tr>
<td>18-24</td>
<td>506 (20.3)</td>
</tr>
<tr>
<td>25-34</td>
<td>1,254 (50.2)</td>
</tr>
<tr>
<td>35-44</td>
<td>481 (19.3)</td>
</tr>
<tr>
<td>45+</td>
<td>256 (10.3)</td>
</tr>
<tr>
<td><strong>Gender identity</strong></td>
<td></td>
</tr>
<tr>
<td>Cisgender man</td>
<td>2,471 (99.0)</td>
</tr>
<tr>
<td>Trans* or other gender identity</td>
<td>26 (1.0)</td>
</tr>
<tr>
<td><strong>Race/ethnicity</strong></td>
<td></td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>295 (12.1)</td>
</tr>
<tr>
<td>Black, non-Hispanic</td>
<td>338 (13.9)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>720 (29.5)</td>
</tr>
<tr>
<td>Multiple/other race, non-Hispanic</td>
<td>99 (4.1)</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>986 (40.4)</td>
</tr>
<tr>
<td><strong>Neighborhood poverty level</strong></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>1,350 (54.8)</td>
</tr>
<tr>
<td>High</td>
<td>1,115 (45.2)</td>
</tr>
<tr>
<td><strong>Neighborhood HIV diagnosis rate</strong></td>
<td></td>
</tr>
<tr>
<td>Lower three quartiles</td>
<td>1,427 (58.0)</td>
</tr>
<tr>
<td>Top quartile</td>
<td>1,035 (42.0)</td>
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</tbody>
</table>
Characteristics of Eligible Participants, continued

Most recent HIV test (N=2,407)

- 14%: 0 to 3 months ago
- 13%: 4 to 6 months ago
- 23%: 7 to 12 months ago
- 29%: More than a year ago
- 21%: Never
Estimated ad impressions
N ~ 6,000,000

Click-through to eligibility survey
N = 39,605

Participants screened for eligibility
N = 3,359

Eligible
74% (2,497/3,359)

Ineligible
26% (862/3,359)

Redeemed
71% (1,766/2,497)
Redemption Rates by Select Characteristics

<table>
<thead>
<tr>
<th>Age</th>
<th>18-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45+</th>
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<tr>
<td>Overall redemption rate = 71%</td>
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<th>Gender identity</th>
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<th>Trans*/other gender</th>
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<tr>
<th>Race/ethnicity</th>
<th>Asian/Pacific Islander</th>
<th>Black, non-Hispanic</th>
<th>Hispanic</th>
<th>Mixed/other</th>
<th>White, non-Hispanic</th>
</tr>
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◆ = p < 0.05
## Redemption Rates by Select Characteristics, continued

Overall redemption rate = 71%

| Neighborhood poverty | High to very high | Low to medium | Overall redemption rate
<table>
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<tr>
<td></td>
<td>71%</td>
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<table>
<thead>
<tr>
<th>Neighborhood HIV diagnosis rate</th>
<th>Bottom 3 quartiles</th>
<th>Top quartile</th>
<th>Overall redemption rate</th>
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<tr>
<td></td>
<td>70%</td>
<td>73%</td>
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<tr>
<th>Most recent HIV test</th>
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<th>Never</th>
<th>Overall redemption rate</th>
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<tr>
<td></td>
<td>67%</td>
<td>73%</td>
<td>75%</td>
<td>72%</td>
<td>65%</td>
<td></td>
</tr>
</tbody>
</table>

◆ = p < 0.05
Summary

- Rapidly distributed over 1750 tests to a diverse population of NYC MTSM.

- Among eligible participants,
  - 44% were MTSM of color; 14% black, non-Hispanic and 30% Hispanic.
  - 14% reported never testing for HIV prior to the Giveaway.
  - 29% reported not having tested in the past year.

- Redemption rates high across all characteristics measured, though significantly lower among
  - MTSM of color, especially black MTSM.
  - Those reporting a recent HIV test and those who had never tested.
Limitations of Results

- Data on ad impressions and click-throughs are estimates and cannot be de-duplicated.

- Data on characteristics of eligible participants were self-reported and thus subject to social desirability bias, recall error, and misrepresentation.

- Information on eligible participants was limited; associations examined may be subject to residual confounding.

- Results of this giveaway may not be generalizable to other settings or populations.
Implications and Next Steps

- Successfully piloted a giveaway of HIV home tests in NYC
  - Rapid distribution
  - High redemption rate

- Reached populations of interest, but would like to improve potential impact
  - Recruit a greater proportion of MTSM of color
  - Recruit more transgender individuals and members of other priority populations

- Next steps/future plans
  - Analyze data on barriers to redemption, test use/results and linkage-to-care
  - Repeat pilot activities semi-annually with adjustments following community feedback
  - Pilot a partnership with community-based organizations to recruit priority populations not reached online
Acknowledgements

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- Estella Yu
- OraSure partners
- Participants!
Thank you!

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Questions?
Extra Slide - Lessons Learned

- Cast a wide net when conducting formative research
  - Included home test programs and past giveaways by NYC Health Dept.

- Engage community at multiple stages
  - Initial planning, material development, beta testing surveys, sharing initial results

- Automate as much of the process as possible
  - Emailing of instructions with unique codes, reminders, and follow-up survey recruitment; collaboration with Orasure website for delivery

- Be aware of private information needed for emailing, shipment and follow-up communications
  - Used survey tool that does not store data in the cloud (Feedback Server)