HIP HOP for HIV Awareness: An innovative approach to community-level HIV prevention

Camden J. Hallmark, MPH¹, Mandy J. Hill, DrPH, MPH², Marlene L. McNeese¹, Nike Blue, MPH², Michael W. Ross, PhD²

¹Bureau of HIV/STD and Viral Hepatitis Prevention, Houston Department of Health and Human Services
²The University of Texas Health Science Center at Houston
³AIDS Foundation Houston, Inc.

Presented at: American Public Health Association's 141st Annual Meeting and Expo
November 2-6, 2013
Boston, MA

Houston/Harris County
HIV Epidemiology
From 2008-2010:
- Decrease in new infections among black women
- Continuing increase in new infections among young MSM

New Diagnoses by Sub-Population

Source: CDC

Houston/Harris Co. HIV Diagnoses, 1999-2011

New HIV Diagnoses by Sex

Source: eHARS - HHS
HIV Diagnoses — Rates by race/ethnicity
Houston/Harris County, 1999–2011

Nationally:
1 in 16 black men will be diagnosed with HIV at some point in his lifetime (CDC)

Source: eHARS - HDHHS

Houston/Harris Co. HIV Diagnoses, 2011

HIV Rates by Age

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Rate per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14 yrs</td>
<td>0.9</td>
</tr>
<tr>
<td>15-19 yrs</td>
<td>23.7</td>
</tr>
<tr>
<td>20-24 yrs</td>
<td>40.7</td>
</tr>
<tr>
<td>25-29 yrs</td>
<td>41.3</td>
</tr>
<tr>
<td>30-34 yrs</td>
<td>43.1</td>
</tr>
<tr>
<td>35-39 yrs</td>
<td>58.1</td>
</tr>
<tr>
<td>40-44 yrs</td>
<td>45.4</td>
</tr>
<tr>
<td>45-49 yrs</td>
<td>27.4</td>
</tr>
<tr>
<td>50-55 yrs</td>
<td>26.3</td>
</tr>
<tr>
<td>55-59 yrs</td>
<td>9.7</td>
</tr>
<tr>
<td>60+ yrs</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Source: eHARS - HDHHS
Houston/Harris Co. HIV Diagnoses, 2011

HIV by Risk

When examining risk by sex, MSM accounted for 79.5% of transmission risk in males

Source: eHARS, HDHHS, unknown risk re-distributed using the CDC's multiple imputation technique

Growing Gap between Deaths and Number of PLWH

GRAPH 1-Numbers of New HIV Diagnoses, Persons Living with HIV, and Deaths among HIV Positive Individuals in Houston/Harris County, 2006 through 2010*
Houston EMA HIV Treatment Cascade

Produced by: The Ryan White Planning Council’s Office of Support, the HDHHS (Bureau of Epidemiology and Bureau of HIV/STD and Viral Hepatitis Prevention), RWPC, and CPG
Source Data: TXDSHS, August 2013

Contributing Factors to HIV/STD Disparities

“STD disparities reflect socioeconomic disparities, which in turn reflect deep-rooted racial inequalities” (CDC, 2007)

Individual sexual risk behavior does not account for the observed racial disparities in STDs (CDC, 2007)

- Higher prevalence in community
  - Houston: highest rate of PLWHA in TX

- Stigma and/or discrimination
  - Houston: larger % of foreign-born and language other than English at home vs. TX overall

- Access to quality medical care and testing
  - Delayed diagnosis and treatment
    - Houston: higher % of uninsured than TX overall

- Social determinants of health
  - Houston: median household income ~$7000 lower than TX median
  - Houston: lower % of high school graduates than TX overall

Source: Houston Area Comprehensive Plan, Graph: CDC, NHIS-HET-1 2006–2007
HIP HOP for HIV Awareness

What is the Intervention?

Mission Objectives

- To **increase knowledge** of HIV disease and other STIs
- To **implement** a personalized prevention and intervention strategy
- To **standardize** service delivery
- To **leverage collaborative relationships** with local community partners and business to create efficiencies in accessing services
- To encourage individuals to **promote awareness** among their peers

HIP HOP for HIV Overview

**Mission Statement**

To provide free and confidential screening, treatment and vaccination for communicable diseases for youth and young adults in Houston/Harris County through a well planned, well documented and well executed intervention.

**Mission Objectives**

- To **increase knowledge** of HIV disease and other STIs
- To **implement** a personalized prevention and intervention strategy
- To **standardize** service delivery
- To **leverage collaborative relationships** with local community partners and business to create efficiencies in accessing services
- To encourage individuals to **promote awareness** among their peers

**Intervention Components**

Registration  
Testing  
Education  
Results  
Evaluation
**Registration**

- At registration, participants consent to testing services, linkage to care services, using their information in the data system, and being photographed.
- An 11-digit confidential code used for client access by prevention & RW providers.
- Participants take a computerized pre-test of HIV/STI prevention knowledge and beliefs and a risk assessment.

**Planning – Health & Medical Intelligence**

- Individual patient look-up in STD*MIS and eHARS for disease history.
- Formats patient records for inclusion of laboratory results and patient risk information.
- Delivers results to results and treatment stations.

**Phlebotomy Stations**

- Staff from state and local HDs, CBOs, hospitals, phlebotomy schools
- Two tubes specimens for rapid HIV, HCV, and RPR
- Urine specimens collected and couriered back to main lab.

**GenProbe-Aptima Testing**

- Formats patient records for inclusion of laboratory results and patient risk information.
On-Site Laboratory Services

- Phlebotomy will take the blood specimens into the laboratory room for HIV, HCV and syphilis
- Rapid HIV & HCV testing completed via batches in the laboratory
- Lab technician places STD confirmation blood work for final results in the folder.
- After specimen submissions, all clients in group remain together and are transported into a classroom for education & skills training.

Education

- All participants are provided sexual health education as they wait for lab results and chart creation
- Experienced youth educators as facilitators in every room
- Post-tests of knowledge and beliefs are completed at kiosk stations
- Counseling & treatment based on risk assessment completed at registration kiosks
- Clinical staff conduct exams and administer prophylaxis or DOT for syphilis, GC and Chlamydia

Treatment & Results
Educational Session

- After HIV/STD testing, sexual health education takes place in classroom of 20-40 participants
  - Approximately 45 minutes
  - Interactive game and condom demonstration
  - PowerPoint educational presentation with facts about HIV/STD prevention, transmission, symptoms, sequelae, and treatment
  - Statistics relevant to target population included

Results

Project Outcomes
2011 Data Analysis

- Subset of 2011 HIP HOP participants received standardized testing, sexual health education, and pre/post-test administration
  - Subset: 38.4% of 6972 total participants (n=2675)
  - Intervention: June 27-30, July 11-14 at a local mall
  - Recruitment primarily by radio messages on hip hop station
    - Estimated reach= 1,231,400 people (valued at $316,400)

![Participants by Age Group](chart)

- Participants by Sex

![Participants by Race/Ethnicity](chart)

- Participants by Educational Level
Pre- and post-assessments conducted before/after sexual health educational session to measure beliefs and knowledge of HIV/STD

Pre- and post-test scores treated as repeated measures
- Significant change in knowledge level ($F=26.34$, $p<.0001$)
- Level of education ($F=2.97$, $p=.01$) and sex ($F=8.83$, $p=.003$) significantly influenced knowledge gains
- Two 3-level significant interactions
  - Knowledge, education, and sex ($F=4.30$, $p=.0007$)
  - Knowledge, education, and race/ethnicity ($F=1.77$, $p=.03$)

Significant change in beliefs for 2 of 3 Health Belief Model constructs measured

The educational session was more effective in some populations.
- For example, the educational session was not as effective in increasing knowledge in those with less than a 9th grade education.

Client knowledge did not increase on all measures.
- Revised educational session
- Ensured better alignment of pre- and post-assessment with educational session
- Solicited input from HDHHS-CFAR Scientific Advisory Council to ensure alignment

Changes to educational session and assessment tools were implemented for HIP HOP 2012 and 2013
Full Results Available

- Collaboration between the HDHHS, AIDS Foundation Houston, and researchers from The University of Texas Health Science Center to produce manuscript
  - Manuscript accepted for publication in *Sex Education*

---

Testing Results

**Over 55,400 tests in seven years**

In 2013:
- 1 in 326 people test positive for Hepatitis C
- 1 in 193 people test positive for HIV
- 1 in 81 people test positive for both Chlamydia and gonorrhea
- 1 in 48 people test positive for gonorrhea
- 1 in 9 people test positive for Chlamydia

**Average public health cost per person = $42.00**
2013 STD Infection Rates

**Syphilis Testing Highlights**

- 44% fewer tests in 2013 vs. 2012 due to transitional year, rebranding activities.

- However, in 2013, the **positivity rate for syphilis (1.72)** is higher than the **positivity rate (1.58)** observed during 2012.

- Higher syphilis positivity rate in 2013 due in part to the increases in syphilis in Houston/Harris that occurred in 2012.

### 2013 HCV Testing

- Computer based Risk assessment would flag records based on reported date of birth 1945-1965:
  - had sex with someone who shared needles to inject any substance under the skin or into the vein (includes drugs, tattoo ink, steroids or hormones);
  - shared needles with someone to inject any substance under the skin or into the vein.

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number Preliminary Pos.</td>
<td>3</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Maximum Age</td>
<td>54</td>
<td>52</td>
<td>54</td>
</tr>
<tr>
<td>Minimum Age</td>
<td>31</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Mode Age</td>
<td>34</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>Mean Age</td>
<td>46</td>
<td>40</td>
<td>42</td>
</tr>
<tr>
<td>Median Age</td>
<td>53</td>
<td>34</td>
<td>41.5</td>
</tr>
<tr>
<td>Standard Deviation Age</td>
<td>13</td>
<td>9.84</td>
<td>10.48</td>
</tr>
</tbody>
</table>

Source: Testing4Tickets Database, 2013 HIP HCP for HIV Awareness

- 514 (21%) registered participants received rapid HCV testing
- 10 (1.94%) positive HCV cases were identified
- Positive HCV cases were referred to St. Luke’s Liver Health Outreach
- 5 of 10 HCV positive cases had a HIV test within the past 12 months
- 2 of 10 HCV positive cases had sex with someone they didn’t know within the past six months
Summary of Lessons Learned

- Don’t miss the opportunity to screen for multiple diseases
- Integrate relevant health services
  - Vaccinations offered for Hepatitis A and B, HPV, Meningitis, and DPT
  - 2011 newly added WIC, family planning, and eligibility screening for health services
- Capitalize on partnerships – local, state and federal
- Consult with key stakeholders; staff, CBOs, legal, Human Resources, etc.
- Disseminate best practice models
  - Numerous presentations at state and national conferences including CDC Vital Signs Town Hall Teleconference, APHA, International AIDS Conference

National Replication

Step Up, Get Tested Chicago

Dallas - Hip Hop for HIV

Oakland

Waco

International AIDS Conference 2012

Hip Hop for Philly

NYC - Bronx Knows

Miami & Ft. Lauderdale

Recognized as the largest HIV testing event in the United States
CONTACT INFORMATION

Camden Hallmark, MPH
Data Analyst
Bureau of HIV/STD and Viral Hepatitis Prevention
Houston Department of Health and Human Services
8000 North Stadium Drive, 5th Floor
Houston, Texas 77054
832-393-4545-phone
832-393-5235-fax
camden.hallmark@houstontx.gov