HIV Care Cascade in the New York City HOPWA Program

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BACKGROUND: NYC HOPWA
HIV/AIDS in New York City (NYC)

- 113,319 persons living with HIV/AIDS (PLWH) in 2011
- 3,404 new HIV diagnoses in 2011
- NYC represents 10% of the national HIV prevalence
- HIV disproportionately affects NYC neighborhoods with low-income, minority populations

NYC HOPWA Housing Program

- NYC Department of Health & Mental Hygiene (DOHMH) oversees the federal Housing Opportunities for Persons with AIDS (HOPWA) grant for NYC
- Serves ~36,000 PLWH annually
- Targets low-income PLWH who are homeless or unstably housed
  - Special populations include: persons with mental illness and/or substance use problems; families with children; adults aged 55 and older
NYC HOPWA Service Portfolio

- **Rental Assistance**
  - Rent subsidies to help establish and/or maintain affordable permanent housing

- **Housing Placement Assistance**
  - Assistance to locate, acquire, finance, and maintain affordable permanent housing

- **Supportive Housing**
  - Affordable permanent housing and comprehensive support services

Support services promote health & housing stability, emphasizing engagement in HIV primary care

- Case management
- Escorts to clinical/social services visits
- Mental health counseling
- Substance abuse counseling
BACKGROUND: HIV CARE CASCADE
What is the HIV Care Cascade?

• **Visual depiction** of the continuum of care and treatment for PLWH
  - Ultimate goal: viral load suppression
• First step to help identify where PLWH have **successful** HIV care and treatment outcomes
• Tool for measuring **gaps** in the HIV care and treatment continuum
• Variations on the cascade have been prepared **nationally** and **locally**
Why Create an NYC HOPWA Care Cascade?

- Illustrate overall engagement in care and treatment for the NYC HOPWA program
- Benchmark against US and NYC Care Cascades
- Identify successes and gaps in care and treatment experienced by HOPWA clients
- Inform policy-makers on program development
- Align with national initiatives
  - White House HIV Care Continuum Initiative (2013)
METHODS
Data Sources

- HOPWA program database
  - Demographics, enrollment, services, housing history
- NYC HIV Surveillance Registry (HSR)
  - Mandatory name-based provider reporting of AIDS (1983) and HIV (2000) diagnoses; laboratory reporting of test results including CD4 counts and viral loads (VLs) (2001)
- HOPWA program data were matched to NYC HSR based on a complex algorithm of identifiers
- Cascades include HOPWA clients enrolled at all in 2011, and reported to HSR as a PLWH by 12/31/11
NYC HOPWA Care Cascade Definitions

Infected
- Estimate based on assumption that 86% of infected are diagnosed

Diagnosed
- Reported to NYC HSR as a PLWH, as of 12/31/2011

Linked
- Any VL or CD4 reported to NYC HSR, 2001-2011, at least 8 days after HIV diagnosis

Engaged
- Any VL or CD4 reported to NYC HSR during 2011

On ART
- Presumed to have ever started on ART: any suppressed VL (≤200 copies/mL) reported to NYC HSR 2001-2011

Suppressed
- Most recent VL reported to NYC HSR in 2011 was suppressed (≤200 copies/mL)

NYC DOHMH surveillance methods, definitions, & data used, for comparability
Interpreting the Care Cascade

- Each bar represents a step in the HIV care continuum
- PLWH have to be in one step to make it to the next
- PLWH can “fall off” at any step
- There are important differences in NYC HOPWA, overall NYC, and US cascades
  - NYC HOPWA cascade includes PLWH residing in NYC and accessing HOPWA services
  - Overall NYC cascade may contain some PLWH no longer living in NYC in 2011, due to unascertained moves or deaths
  - US (CDC) cascade employs 3 national databases; data sources and definitions differ from NYC’s
NYC HOPWA Client Demographics, 2011

<table>
<thead>
<tr>
<th></th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>66</td>
</tr>
<tr>
<td>Black</td>
<td>52</td>
</tr>
<tr>
<td>Hispanic</td>
<td>38</td>
</tr>
<tr>
<td>Age (median years)</td>
<td>48</td>
</tr>
<tr>
<td>Foreign-born</td>
<td>15</td>
</tr>
<tr>
<td>AIDS-diagnosed</td>
<td>72</td>
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</tbody>
</table>
OVERALL CARE CASCADES
US Care Cascade

82% of diagnosed
66% of diagnosed
45% of diagnosed
40% of diagnosed
30% of diagnosed

US: The largest drop is from linked to care to retained in care.

NYC Care Cascade, 2011

NYC: The largest drop is from ever linked to care to engaged in care in 2011.

NYC HOPWA Care Cascade, 2011

HOPWA: The largest drop is from ever started ART to suppressed in 2011.

As reported to the New York City Department of Health and Mental Hygiene by September 30, 2012.
NYC HOPWA clients have higher engagement in each stage of HIV care, compared to NYC and US.

**NOTE:** Different cascade methods/definitions used for US compared to overall NYC and NYC HOPWA.

CARE CASCADES BY DEMOGRAPHIC SUBGROUP
Care cascades for male and female PLWH are very similar.

As reported to the New York City Department of Health and Mental Hygiene by September 30, 2012.
Black and Hispanic PLWH are least likely to be suppressed.

As reported to the New York City Department of Health and Mental Hygiene by September 30, 2012.
NYC HOPWA Care Cascade, 2011
By Age as of 12/31/2011

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Enrolled</th>
<th>Linked to care</th>
<th>Engaged in care</th>
<th>Started ART</th>
<th>Virally suppressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-24</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
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<td>100%</td>
</tr>
<tr>
<td>25-34</td>
<td>100%</td>
<td>100%</td>
<td>94%</td>
<td>95%</td>
<td>95%</td>
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<tr>
<td>35-44</td>
<td>100%</td>
<td>100%</td>
<td>95%</td>
<td>86%</td>
<td>89%</td>
</tr>
<tr>
<td>45-54</td>
<td>100%</td>
<td>100%</td>
<td>95%</td>
<td>95%</td>
<td>94%</td>
</tr>
<tr>
<td>55-64</td>
<td>100%</td>
<td>100%</td>
<td>96%</td>
<td>96%</td>
<td>71%</td>
</tr>
<tr>
<td>≥65</td>
<td>100%</td>
<td>100%</td>
<td>96%</td>
<td>96%</td>
<td>78%</td>
</tr>
</tbody>
</table>

With increased age, both ART and suppression are more likely, in a clear gradient.

As reported to the New York City Department of Health and Mental Hygiene by September 30, 2012.
Foreign-born PLWH are more likely to start ART and be suppressed.

As reported to the New York City Department of Health and Mental Hygiene by September 30, 2012.
DISCUSSION
NYC HOPWA Care Cascade Summary

• HOPWA clients have high linkage to and engagement in HIV care
  ▪ HOPWA program emphasis on promoting HIV care visits
  ▪ DOHMH quality improvement initiatives
• HOPWA clients are most likely to fall off at ART and suppression stages
  ▪ Low-income
  ▪ Minority
  ▪ Co-occurring conditions, e.g., mental illness, substance abuse
• Successful completion of the care cascade varies slightly by demographic subgroup
How can NYC HOPWA Close the Gaps?

• Take a closer at what is working and what is not
  - Our biggest gap is viral suppression
• Continue strong emphasis on engagement in HIV care and treatment among clients
• Enhance our holistic approach to addressing clients’ needs – including mental health and substance use services – which are linked to HIV care engagement and viral suppression
• Focus on populations vulnerable to poor outcomes
• Monitor cascade outcomes over time
Program/Policy Implications

• Inform policy-makers on successful HIV care and treatment outcomes among HIV housing clients
  ▪ Importance of housing services (e.g., HOPWA, Ryan White)
• Highlight the usefulness of surveillance data for program evaluation of housing services
• Identify best practices – successful program models – to replicate and disseminate within HIV community
• Make recommendations on policy and program design that strengthen the link between housing services and HIV care cascade success
Acknowledgements

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