Expanded surveillance to better address HIV/AIDS in Washington DC and beyond

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By Dana Thomson

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Outline

- Background
  - HIV/ AIDS in DC
  - This Study
- Social Determinates of HIV/ AIDS
- Standard HIV/ AIDS Surveillance Indicators
- Study Methods & Results
- Conclusions
  - Add SES indicator to HIV/ AIDS surveillance
  - Local mapping can be used effectively and safely to understand and intervene on HIV/ AIDS
Background

- 1 in 20 adults infected with HIV/ AIDS
- HIV/ AIDS Case Management Protocols mandate the collection of 30+ pieces of data from individuals enrolled in DC area HIV/ AIDS case management programs
- First HIV statistics for DC released in 2007
Social Determinates

“The economic and social conditions that influence the health of individuals, communities, and jurisdictions as a whole... [including] conditions for early childhood development; education, employment, and work; food security; health services, housing, income, and income distribution; social exclusion; the social safety net; [and] job security.” – Sharpe, et al. in Social Determinates of Health special issue, 2010

Source: Social Determinates of Health special issue. 2010. Public Health Reports Vol 125, Suppl 4
Social Determinates & HIV/ AIDS

- **Blacks** are 9 times more likely than **whites** to become infected with HIV in the US. – CDC, 2008

- **Low income** black MSMs engage in riskier sexual behavior than **higher income** black MSMs. – Peterson, et al., 1992

- HIV-infected people with **low literacy** have less general knowledge about their disease and are less likely to adhere to treatment than HIV-infected people with **high literacy**. – Waite, et al., 2008

Sources:
Surveillance Indicators

What is Collected

- Age
- Sex
- Race/Ethnicity
- Mode of Transmission
- County

What is NOT collected

- Income
- Education
- Housing status
- Local geography
- Health Status (e.g. TB, hepatitis, STIs)
Consequence of no SES Indicator

- “Gay Epidemic” → “Black Epidemic”
- Can’t target HIV prevention and intervention in DC because 60% of the population is black
- Being black or Hispanic is conflated with low SES
Study Outline

- Summarize demographic, social, economic, medical, and geographic characteristics of people diagnosed with HIV/AIDS at Whitman-Walker in calendar year 2007.
- Driven by a social determinates framework.
- Used local-level maps to summarize social, economic, and demographic data.
Study Goals

- Publicize potentially useful socio-economic data about a sample of HIV infected individuals in the DC area.
- Demonstrate local-level mapping as a tool for HIV/AIDS prevention and intervention.
Study Methods

- Sample: 688 patients diagnosed HIV-seropositive at the three Whitman Walker clinics between Jan 1-Dec 31, 2007
- First sero-positive diagnoses at WWC
- Not necessarily the patient’s first diagnosis
- Digitize 37 pieces of data from case management intake form in patient’s paper medical chart
## Data Collected, by Clinic

<table>
<thead>
<tr>
<th>Category</th>
<th>Data Collected</th>
<th>Elizabeth Taylor</th>
<th>Max Robinson</th>
<th>Northern Virginia</th>
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<td>Orientation</td>
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<tr>
<td></td>
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<td></td>
<td>Mode of Transmission</td>
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<td>Source of Payment</td>
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</table>
Geography
NOTE: Each patient is represented by a random point in the census tract in which s/he lives (or receives mail).
WWC 2007 HIV/AIDS cases

Average Rate of HIV cases, 2001-2006
Demographics
Medical
Socioeconomic
Roommate/Spouse/Partner
Conclusions

- Maps
  - Reveal patterns that are otherwise hidden
  - Highlight sub-populations and neighborhoods most affected by HIV/AIDS
- Socioeconomic data is key to understanding HIV/AIDS risk; add it to local and national surveillance
Next Steps

- Apply these methods to HIV/AIDS datasets representative of the population
Thank you!

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