Assessing HIV/AIDS Prevention Services in Three Connecticut Cities

Community Health Program Planning 2010 – Field Action Report
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Background

CT Department of Public Health (DPH) data shows a downward trend in HIV incidence and mortality from 2002 to 2009, resulting in increased survival of people living with HIV/AIDS (PLWHA).[1] However, several subgroups, including African Americans, Hispanics, and men who have sex with men (MSM) continue to be disproportionately affected by HIV/ AIDS.[2]

Every three years, the CT HIV Planning Consortium (CHPC) develops a Comprehensive Statewide Plan for HIV Care and Prevention, which outlines the epidemiological profile of HIV in the state, identifies priority populations to be reached, identifies gaps in service, and outlines a plan of action. DPH uses the plan to inform allocation of government dollars for HIV care and prevention. However, to date, no analysis has been done to determine whether prevention services are reaching priority populations.

Trends in people living with HIV/AIDS and deaths, Connecticut, 2002-2009.

Project methods

We assessed utilization of prevention services in Hartford, Willimantic, and New Haven, Connecticut. Through this research, we identified geographical gaps in preventive services for particular higher risk populations.

> Goal: To decrease HIV incidence through efficient allocation of HIV prevention resources

Our project employed a three-fold methodology to assess access to HIV prevention services. First, community need for services was quantified from CT population statistics collected by DPH. These figures were then compared with the availability and use of HIV prevention services offered by identified community-based organizations. United States Census data was used to identify neighborhoods with the demographic factors of high-risk populations. Geographic information systems (GIS) were then used to map the locations of prevention services relative to identified populations at risk for HIV. Past literature has demonstrated the importance of proximity in ensuring access to health services.[3] Finally, two key informant interviews carried out via e-mail helped shed light on additional factors and patterns that the secondary data in our utilization and geographical analyses may have overlooked.

Sample description

Thirteen agencies delivered a total of 36 interventions (26 different interventions) in the three cities. Of these interventions, 14 were in Hartford, nine in New Haven, and three in Willimantic. Utilization data on three interventions, one in each city, were missing in the present analysis.
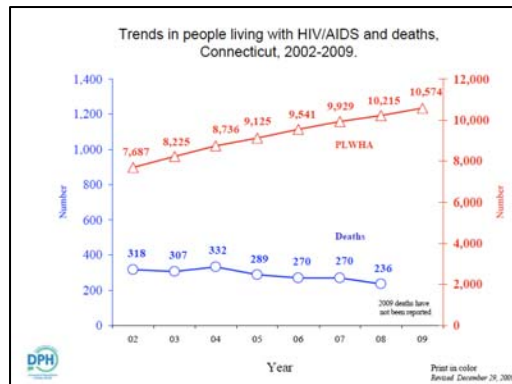
Results

Of the 23 HIV/AIDS prevention interventions in Connecticut for which we obtained data, 14 either met or exceeded their target utilization rates. However, meeting the target utilization rate does not mean that the prevention service is successfully targeting the appropriate demographic and priority populations.

On the city level, we found many instances where gaps in utilization exist. In Hartford, we identified disparities in prevention services utilization among populations of injection drug users (IDU) and African-American men who have sex with men (MSM). In New Haven, males, MSM, IDU, and those aged 45 and older were found to utilize HIV/AIDS prevention services at disproportionately low rates. Finally, Willimantic HIV/AIDS prevention services are not being utilized by MSM.

The geographic analysis identified the following high-risk populations as having lower geographic access to preventive services:

City	Populations with lack of geographic access
Hartford	African Americans, median age 50+
New Haven	African Americans, Whites
Willimantic	Median age group 40+

Most strikingly, our geographical data revealed that HIV/AIDS interventions in Hartford are concentrated in areas with high numbers of Hispanics [Fig 1], but much fewer are located in areas where high numbers of African Americans live [Fig 2]. There are also very few locations concentrated in areas of Hartford with higher median age. However, there appears to be a fair distribution of HIV/AID services in areas where men are concentrated.

Similarly our findings in New Haven revealed that interventions are more concentrated in areas with high numbers of Hispanics [Fig 3], but are lacking in areas

where African Americans [Fig 4] and Whites [Fig 5] are in higher numbers. Finally, it appears that a fair number of locations were in close proximity to men and the high-risk median age groups for New Haven.
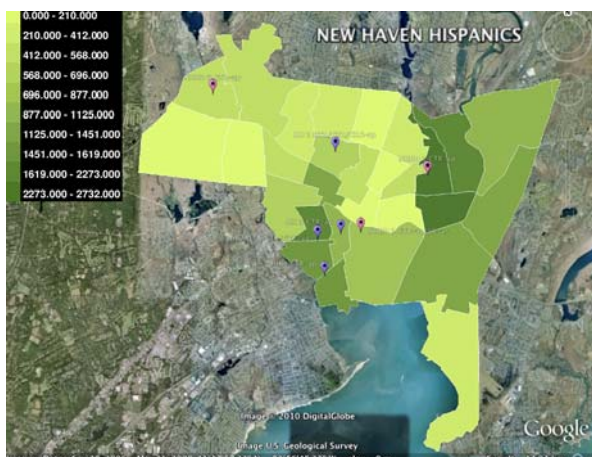
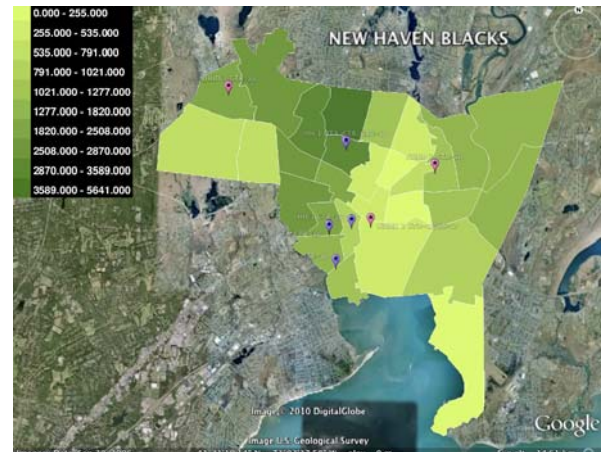**Figure 1. Hartford HIV/AIDS services relative to Hispanics.**
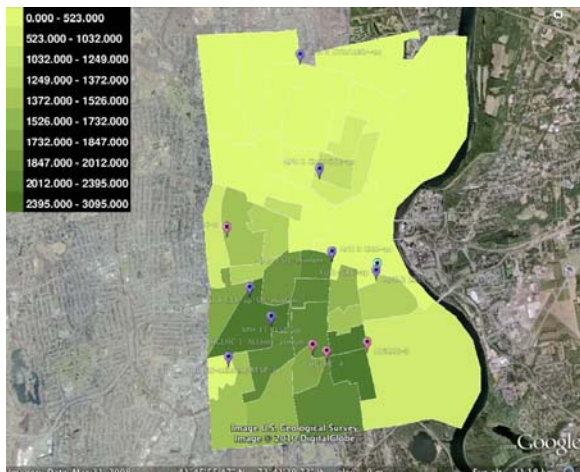
Figure 2. Hartford HIV/AIDS services relative to African Americans.
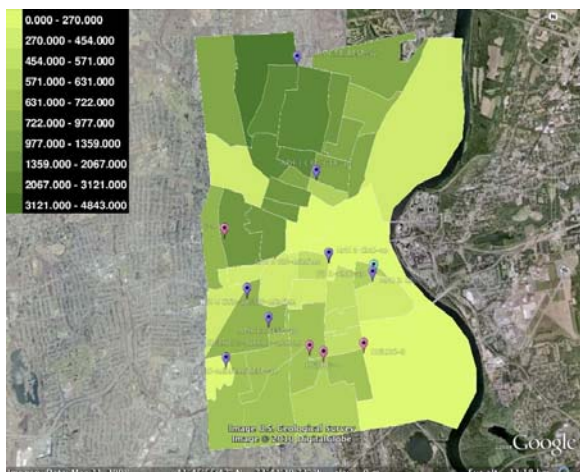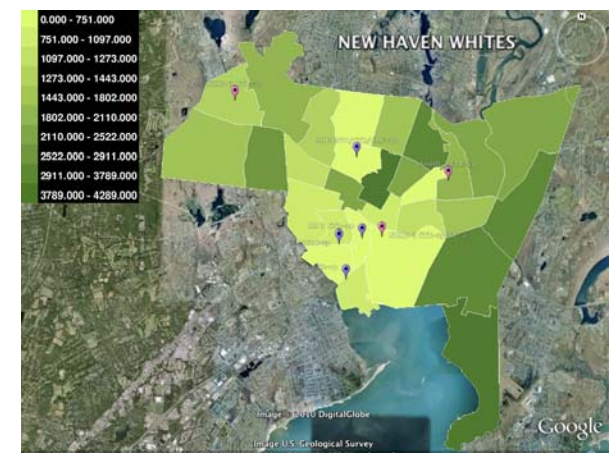

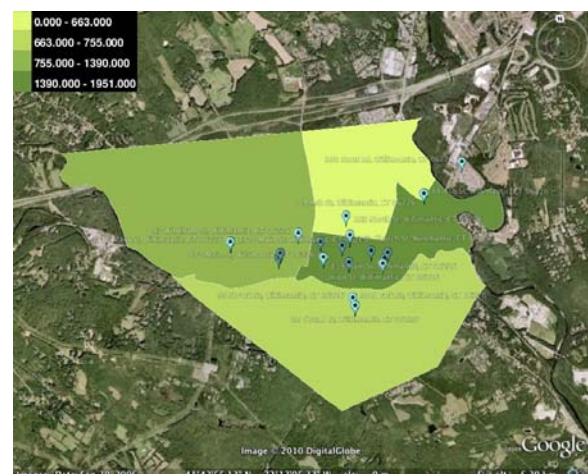**Figure 3. New Haven HIV/AIDS services relative to Hispanics.**

Figure 4. New Haven HIV/AIDS services relative to African Americans.

Figure 5. New Haven HIV/AIDS services relative to Caucasians.

Figure 6. Willimantic HIV/AIDS services relative to Hispanics.

The geographical results in Willimantic appear most promising for Hispanics [Fig 6], which is the subgroup most at risk in this city. There are a fair number of services located near Whites as well, although fewer than are in Hispanic neighborhoods. Moreover, the locations were also in close proximity to high male

areas, but not as many in areas where older median age groups reside.

Qualitative component
Key informant interviews revealed a number of different barriers to utilization, such as the community's lack of information on existing services. A key barrier gleaned from interviews was time management.

Interviewees indicated that community members often struggle to meet personal responsibilities such as job and family obligations, and thus it is difficult for them to take the time to utilize prevention services. This is compounded by restrictive hours of operation by the HIV/AIDS service organization. IDUs were highlighted as a population especially facing difficulties in utilizing prevention services regularly.

Further, key informants were unable to provide specific information on how their agencies used the utilization data.

Conclusions and recommendations
In Hartford, IDU and African-American MSM show the greatest gaps in service utilization; in New Haven it is men, MSM, IDU and people over 45; in Willimantic it is MSM. In addition to gaps in service utilization, there are gaps in coverage of geographic areas where there are greater populations in high risk demographic categories

City	Gaps in Service Utilization
Hartford	IDU, African-American MSM
New Haven	Males, MSM, IDU, 45+
Willimantic	MSM

Agencies are committed to recording and reporting their services' utilization, but this information can and should be more actively used to help with future decision-making.

City	Populations with lack of geographic access
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Willimantic	Median age group 40+

- DPH and/or agencies could work toward establishing a systematic monitoring and evaluation process that analyzes utilization data.
- Improve upon the methods employed in this project to serve as a starting point for future monitoring and evaluation of utilization data.
- Integrate utilization data into future decisions and policies to improve services.
- Place and deliver services in a way that minimizes the extent to which community members have to go out of their daily routines and obligations:
  - Replicate existing agencies' models that send outreach workers to places where the clients would already naturally be.
  - Provide services during evenings and weekends.

The maps provide evidence that several high-risk communities do not have geographic access to prevention services they need. Efforts must be made to ensure that services are located in these communities. Finally, CT HIV/AIDS organizations should look to each other for support and collaboration in moving forward to meet the needs of their communities.

Limitations
- Utilization data: missing, errors, lack of standardized process, bias (e.g. social desirability), short time period.
- Target number does not necessarily reflect community need, so 100% utilization not necessarily gold standard.
- Maps: could not obtain locations of high-risk communities, instead relied on locating demographics associated with higher epidemiological risk. Not all agencies responded to request for service locations.
- Geographical analysis: did not consider other factors that play into geographical proximity (e.g. transportation).
- Interviews: selection bias (only 2 agencies responded), social desirability bias, failed to incorporate insight of agencies

References and Resources
1. Connecticut Department of Public Health HIV/AIDS Surveillance Report. HIV/AIDS cases by year of report, diagnosis, death and prevalence (1980-December 31, 2009).
2. "Connecticut Comprehensive HIV Prevention and Care Plan 2009-2012". Connecticut HIV Planning Consortium. Connecticut Department of Public Health. http://www.ct.gov/dph/lib/dph/aids_and_chronic/care/pdf/2009_2012_comprehensive_hiv_care_and_prevention_plan.pdf. October 15, 2009.
3. Lois M. Takahashi et al., "Navigating the time-space context of HIV and AIDS daily routines and access to care," *Social Science and Medicine*, Vol 53, 2001
4. CARC www.ctaidscoalition.org