Evaluating the Continuum of Human Immunodeficiency Virus (HIV) Care among Kentuckians Living with HIV Disease, 2009

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**Background**

Persons living with HIV/AIDS (PLWHA) receive the most benefits from antiretroviral therapy (ART) when they are tested and diagnosed early, are engaged in regular care, and are adherent to treatment. Optimal engagement in HIV care is essential as it can enhance viral load suppression, which in turn, decreases risk of HIV transmission. Therefore, it is important to increase the number of individuals living with HIV who are diagnosed, linked, and retained in care.

**Objective**

To evaluate the continuum of HIV care among Kentuckians living with HIV disease by the end of 2009.

**Methods**

- The Kentucky Department for Public Health conducted a retrospective analysis of Kentuckians diagnosed with HIV disease by December 31, 2008, and living through December 31, 2009. Data reported through December 31, 2012 were used.
- Persons included were Kentuckians diagnosed with HIV disease, by the end of 2008, and living through 2009. Persons reported in the enhanced HIV/AIDS registry (eHARS) were linked to three databases: 1. CAREWare; 2 Medicaid; and 3. Kentucky AIDS Drugs Assistance Program (KADAP) database.

**Continuum of Care Measures:**

- **HIV Infected** – the number of Kentuckians who were infected with HIV disease (aware and unaware).
- **Concurrent HIV/AIDS diagnosis** (an AIDS diagnosis ≤30 days of the initial HIV diagnosis) was used as a surrogate measure for persons unaware (29%).
- **HIV Diagnosed** – the percentage of PLWHA who were diagnosed with HIV disease by 2008 and living through December 31, 2009, reported through December 31, 2012.
- **Linked to Care** – the percentage of newly diagnosed Kentuckians in 2009 successfully linked to HIV medical care within 3 months of their initial HIV diagnosis.
- **Retained in Care** – percentage of PLWHA having ≥2 visits separated by ≥3 months in 2009.
- **Prescribed ART** – percentage of PLWHA prescribed ART throughout the course of their infection.
- **Virally Suppressed** – percentage of PLWHA with a viral load ≤200 copies/ml in 2009.

Data were analyzed using SAS v.9.3 (Cary, NC) and linkages were performed using LinkPlus software.

**Results**

At the end of 2009, 6,402 Kentuckians were estimated to be living with HIV, for a prevalence rate of 148 cases per 100,000 population.

- Of the 6,402 Kentuckians living with HIV in 2009, an estimated 71% were aware of their infection, and an estimated 18% were virally suppressed.
- Less than one-third of all Kentuckians living with HIV were retained in care.
- Males were less likely to be engaged in ongoing care and less likely to be virally suppressed compared to females.
- Hispanics (19%) were least likely to be retained in care compared to blacks (29%) and whites (33%).
- Blacks (13%) and Hispanics (11%) were least likely to be virally suppressed compared to whites (21%).
- Injection drug users (IDU) (16%) and those with an undetermined risk (8%) were least likely to be virally suppressed.

**Limitations**

Estimates of viral suppression may be underestimated due to laboratory reporting laws in Kentucky. Laboratories are required to report all CD4 counts and only detectable viral loads.

**Conclusions**

In order to reduce HIV morbidity and transmission in Kentucky, improvements at each stage of the continuum are essential. Among the Kentuckians living with HIV at the end of 2009, approximately 71% were aware of their diagnosis, but only 18% were virally suppressed. Males, blacks, and Hispanics were not as actively engaged in HIV care compared to their counterparts. The focus for HIV care engagement should be on these groups.

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