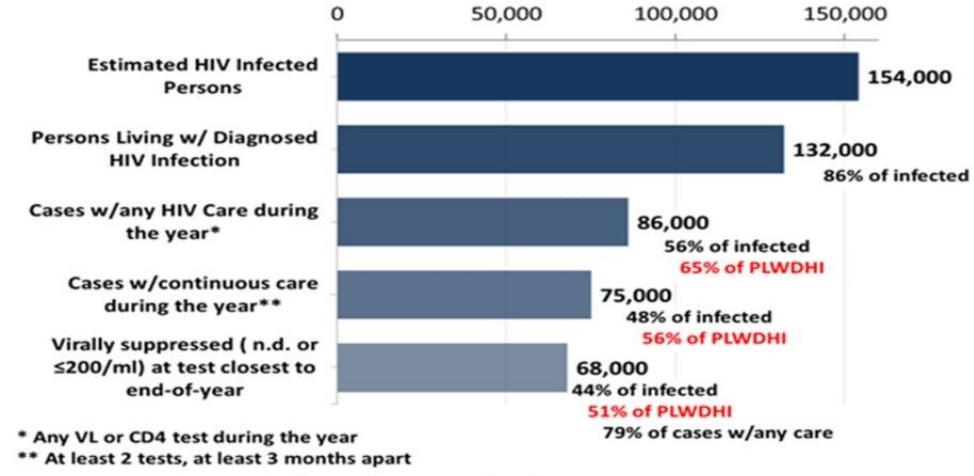
NEW YORK STATE DEPARTMENT OF HEALTH
AIDS Institute
HIV/AIDS • STD • VIRAL HEPATITIS • LGBT HEALTH • DRUG USER HEALTH

Ending the Epidemic in New York State

For more than three decades, the HIV/AIDS epidemic has exacted significant social, economic and political tolls on US and international communities. However, the capacity of doctors and public health officials to combat and control the HIV/AIDS epidemic has changed dramatically in recent years. Reducing the incidence of HIV infections to below epidemic proportions is now an attainable goal. By helping all people living with HIV (PLWH) achieve viral load suppression (<200 copies/ml) through anti-retroviral therapy (ART), it is possible to both decrease transmission and inhibit the progression of HIV to AIDS.[1]

The HIV cascade of care, also referred to as the care continuum, is an effective tool to analyze health outcomes for patients and populations and to map out the sequential stages of HIV care within a distinct population. The cascade draws upon data obtained from surveillance databases and other data sources and can be used to frame activities to improve linkage, retention and viral load suppression.

Figure 1. Cascade of HIV Care, New York State, 2012



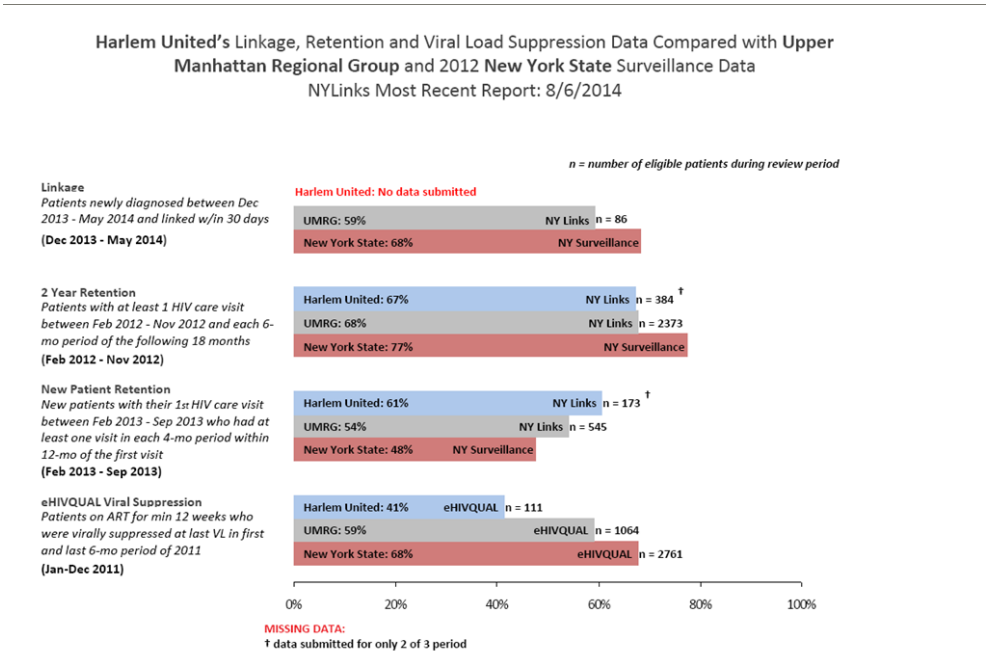
http://intranet/news_features/2014/aids_cascadeofcare.html

New York State has the "highest number of persons living with diagnosed HIV infection in the United States and ranks fourth among states in annual new diagnoses of HIV infections."[2] New York State is the first state in the U.S. to potentially bring the incidence of HIV/AIDS below epidemic proportions. In recent years, thanks to new and effectively implemented prevention and treatment measures throughout the State, new diagnoses of HIV have declined, as has the rate at which PLWH has progressed to AIDS.[3] In the 2012 New York State cascade of HIV care (Figure 1), approximately 44% of people living with HIV have achieved viral load suppression.[4] While the most recent data suggest that New York State performs well above the national rates in viral load suppression and retention, standardized measures for local, state, and national level cascades do not exist, complicating

[1] "AIDS Institute Priorities: 2014-2015." March 19th, 2014. New York State.
[2] Smith, Lou C., Gordon, Daniel, Watson, Carol-Ann, Pulver, Wendy, Wang, Ling, Anderson, Bridget J., O'Connell, Dan, and Guthrie S. Birkhead. 2014. *The "End of AIDS" in New York State? Insights from HIV Surveillance Data*. Poster Presentation. The New York State Department of Health AIDS Institute.
[3] Smith, Lou C., et al, (2014).
[4] Swain, Carol-Ann. July 9, 2014. *'Cascade of HIV Care' Will Track State's Progress in Ending AIDS as an Epidemic*. http://insider/news_features/2014/aids_cascadeofcare.html

comparability between them. At this point in time, New York State is analyzing data sets to calculate rates of antiretroviral usage as part of its cascade data. Available data sources will be cross-matched to determine these rates.

The cascade is an effective way for providers and public health officials to track progress in the sequential steps of HIV care, and has been adapted to different settings. The NY Links Initiative has developed a local facility level cascade generator to help agencies throughout the state to analyze and visualize their self-reported cascade data on linkage and retention rates and identify critical gaps in their localized cascade of care (See Chart to right).



Closing gaps in the New York State cascade of care is a top priority for public officials, consumers, providers and other stakeholders involved in the fight against HIV. See below for a list of AIDS Institute funded initiatives addressing gaps in the NYS Cascade.

In late June of 2014, Governor Andrew Cuomo announced a three point plan to bring the incidence of HIV to below epidemic levels in New York State. This initiative, spearheaded by the New York State Department of Health AIDS Institute, aims to reduce the number of new HIV cases from 3,000 per year to 750 by 2020.[5] It also seeks to reduce the number of cases that progress from HIV to AIDS by 50% by 2020.[6] In order to achieve these targets, the initiative draws upon a 3-pronged approach:

1. *Identifying persons with HIV who remain undiagnosed and linking them to health care;*
2. *Linking and retaining persons diagnosed with HIV to health care and getting them on anti-retroviral HIV therapy to maximize HIV virus suppression so they remain healthy and prevent further transmission; and*
3. *Providing access to Pre-Exposure Prophylaxis (PrEP) for high-risk persons to keep them HIV negative.*[7]

[5] Cuomo, Andrew M. June 29th, 2014. *Governor Cuomo Announces Plan to End the AIDS Epidemic in New York State*. http://www.governor.ny.gov/press/06292014-end-aids-epidemic
[6] Cuomo, Andrew M. June 29th, 2014.
[7] Cuomo, Andrew M. June 29th, 2014.

A taskforce of stakeholders representing public and private industry, and community leaders will meet from September to December of 2014 to develop and issue an executive plan to implement the three points of this initiative.

The New York State Initiative to bring the incidence of HIV to below epidemic levels has been bolstered by a number of recent legislative changes:

1. *Patients no longer need to provide written informed consent to get an HIV test and now may order HIV tests through verbal consent.*
2. *Data from the New York State Department of Health may now be shared with health care providers to help them find PLWH lost to care.*
3. *In New York City, rent for more than 10,000 PLWH has been capped at 30% of patient income, allowing PLWH to remain stably housed, which improves their ability to take their medication regularly.*[8]

In addition, three pharmaceutical companies that comprise 70% of the HIV market – AbbVie, Bristol-Myers Squibb, and Gilead – have agreed to provide supplemental rebates for their medications, lowering state costs and working to ensure consistent access to medications, thereby assuring maintenance of viral load suppression.[9]

Public health officials expect that these increased efforts will improve existing gaps in the NYS cascade of care. In the short term, medication costs to treat HIV will increase, but in the long term, according to Governor Cuomo's office, the "initiative will pay for itself."[10] According to projections, each HIV infection prevented saves approximately $350,000 to $400,000 in life time medical costs. In the long term the Ending the Epidemic Initiative projects to save the State of New York approximately $317 million and "prevent more than 3,400 new cases of HIV" by 2020. [11,12,13]

As the fourth decade of the AIDS epidemic begins, significant medical advances and policy changes have altered the landscape of HIV care, treatment, and prevention. With proper implementation and vigilance, it is now possible to reach the end of the AIDS epidemic.

[8] Cuomo, Andrew M. June 29th, 2014.
[9] Cuomo, Andrew M. June 29th, 2014.
[10] Cuomo, Andrew M. June 29th, 2014.
[11] Cuomo, Andrew M. June 29th, 2014.
[12] Farnham et al. Lifetime costs and quality-adjusted life years saved from HIV prevention in the test and treat era. *JAIDS* 2013;64(2):e15-18.
[13] Schackman BR, Gebo K a, Walensky RP, et al. The lifetime cost of current human immunodeficiency virus care in the United States. Med Care. 2006;44(11):990-7. doi:10.1097/01.mlr.0000228021.89490.2a.

AIDS Institute Initiatives Specifically Addressing the Cascade of Care and Ending the Epidemic

Initiative	Description
NY Links	The NY Links Project identifies innovative solutions for improving linkage to and retention in HIV care to support the delivery of routine, timely, and effective care for persons living with HIV/AIDS in NYS. A NY Links Evaluation Center will be responsible for developing local and regional cascades, thus allowing AI to interact with providers about achieving outcomes. Provides AI with the ability to track interventions, evaluate models, and determine best practices. The Evaluation Center will also provide TA to providers in order to improve data quality.
Expanded Partner Services (Ex-PS)	Expanded Partner Services uses HIV surveillance data to identify previously known HIV positive individuals who appear to be out-of-care. More specifically, individuals diagnosed with HIV in one of the participating counties who have no viral load (VL) or CD4 labs within the HIV Tracking System in the past 13 to 24 months. These presumed out-of-care individuals are targeted for expanded partner services, with the specific objectives of re-engaging these individuals in medical care and notifying and testing/treating partners. Previously known positive persons identified as out-of-care are interviewed and offered comprehensive partner notification services, inclusive of: linkage to medical care; referrals for identified supportive services; risk reduction counseling; and safer sex supplies. Any identified partners are contacted and offered HIV and STD testing as indicated. Once previously known positive persons are located and linked to care AIDS Institute staff track their VL and/or CD4 labs over the course of six months to evaluate linkage to medical care and viral load suppression.
Linkage, Retention and Treatment Adherence Initiative	The Linkage, Retention, and Treatment Adherence (LRA) initiative has two primary objectives: (1) to improve outcomes for people living with HIV/AIDS (PLWHIV/AIDS) by increasing their linkage to care, improving their retention in care and promoting adherence to antiretroviral therapy (ART), resulting in viral suppression and improved health; and (2) to improve the ability of programs and the AIDS Institute to assess outcomes in the areas of linkage to care, viral suppression and retention in care. The AIDS Institute's Office of the Medical Director carries out these objectives by promoting a model of HIV care that facilitates linkage to care and actively addresses the retention of patients in HIV primary care through strategies that stress collaboration within the facility and with community partners. These efforts are combined with evidence based interventions that promote adherence to ART. The LRA program was designed to support and complement the work conducted within the Division of HIV and Hepatitis Health Care as well as the Division of HIV/STD/Hep C Prevention Services, and is closely integrated with the NYLINKS initiative.
High Impact Care and Prevention Project (HICAPP)	High Impact Care and Prevention Project (HICAPP) (also known at the national level as Partnerships for Care (P4C)) is a three-year project to improve collaboration among CDC-funded state health departments and HRSA-funded health centers to expand the provision of HIV prevention and care services within communities most impacted by HIV, especially racial/ethnic minorities, and to better serve PLWH. Through strengthening partnerships this project intends to: Identifying promising models for HIV service delivery; Improve identification of undiagnosed HIV infection; Establish new access points for HIV services; and Improve HIV outcomes along continuum of care.

Positive Pathways	Positive Pathways is a demonstration project funded by the CDC. It represents a unique collaboration between the NYS Department of Health AIDS Institute (AI), the NYS Department of Corrections and Community Supervision (DOCCS) and five community based organizations. These agencies are working together to reduce HIV related stigma in the correctional setting, identify and treat HIV positive inmates and support linkage to medical care and HIV treatment adherence upon and after community re-entry. Positive Pathways targets both structural and individual factors to deliver theory-based activity and concrete service provision in correctional facilities and communities across NYS.
Primary Care Initiative	The Primary Care Initiative is being repurposed to address the Ending the Epidemic initiative. Services will be dedicated to those newly diagnosed and those consumers who have not been successful in achieving V/L suppression. Intensive, focus care management and coordination. Earlier models provided medical case management to all patients in HIV primary care.

Bibliography

"AIDS Institute Priorities: 2014-2015." March 19th, 2014. New York State.

Cuomo, Andrew M. June 29th, 2014. *Governor Cuomo Announces Plan to End the AIDS Epidemic in New York State*. http://www.governor.ny.gov/press/06292014-end-aids-epidemic

Farnham et al. Lifetime costs and quality-adjusted life years saved from HIV prevention in the test and treat era. *JAIDS* 2013;64(2):e15-18.

"HIV/AIDS Care Continuum." HIV/AIDS Care Continuum. AIDS.gov, 18 Dec. 2013. Web. 31 July 2014.

Schackman BR, Gebo K a, Walensky RP, et al. The lifetime cost of current human immunodeficiency virus care in the United States. Med Care. 2006;44(11):990-7. doi:10.1097/01.mlr.0000228021.89490.2a.

Smith, Lou C., Gordon, Daniel, Watson, Carol-Ann, Pulver, Wendy, Wang, Ling, Anderson, Bridget J., O'Connell, Dan, and Guthrie S. Birkhead. 2014. *The "End of AIDS" in New York State? Insights from HIV Surveillance Data*. Poster Presentation. The New York State Department of Health AIDS Institute.

Swain, Carol-Ann. July 9, 2014. *'Cascade of HIV Care' Will Track State's Progress in Ending AIDS as an Epidemic*. http://insider/news_features/2014/aids_cascadeofcare.html