GET TESTED.
TREAT EARLY.
STAY SAFE.

End AIDS.

Bruce D. Agins, MD MPH
Medical Director, AIDS Institute
Adherence 2017; Miami
Tour of the Talk

Background: Ending the Epidemic
Current progress
Selected implementation strategies
Tracking how we are Ending the Epidemic
Working with stakeholders
Involving care and treatment providers
Dashboard
Defining the End of AIDS

Reduce new infections to 750 annually by the end of 2020

Three Point Plan

1. Identify all persons with HIV who remain undiagnosed and link them to health care.

2. Link and retain those with HIV in health care, to treat them with anti-HIV therapy to maximize virus suppression so they remain healthy and prevent further transmission.

3. Provide Pre-Exposure Prophylaxis for persons who engage in high risk behaviors to keep them HIV negative.
ETE Task Force and Blueprint

The 30 BP Recommendations include various steps that can be taken now to get New York State to the stated goal of 750 new HIV infections per year by the end of 2020.

The 7 GTZ Recommendations represent additional steps that aim to accelerate movement towards no new infections, depending on fiscal and policy realities. These recommendations are not necessary to get to the goal of 750 new HIV infections per year by the end of 2020.
Where are we now?
<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated HIV-Infected Persons</td>
<td>121,900</td>
<td>92% of infected</td>
</tr>
<tr>
<td>Persons Living w/Diagnosed HIV Infection</td>
<td>111,900</td>
<td>74% of infected</td>
</tr>
<tr>
<td>Cases w/any HIV care during the year*</td>
<td>90,300</td>
<td>81% of PLWDHI</td>
</tr>
<tr>
<td>Cases w/continuous care during the year**</td>
<td>73,900</td>
<td>61% of infected</td>
</tr>
<tr>
<td>Virally suppressed (n.d. or &lt;200 copies/ml) at test closest to end-of-year</td>
<td>75,400</td>
<td>66% of PLWDHI</td>
</tr>
</tbody>
</table>

* Any VL, CD4, genotype test during the year; ** At least 2 tests, at least 91 days apart.

† Based on most recent address, regardless of where diagnosed. Excludes persons with AIDS with no evidence of care for 5 years and persons with diagnosed HIV (non-AIDS) with no evidence of care for 8 years.

‡ Estimated unknown 6.7 for NYC and 13% Rest of State.
Newly Diagnosed HIV Cases, 2010-2015

December 2016 BHAЕ statewide analysis file
Newly Diagnosed HIV Cases, 2010-2015

Average Change 2010-2015 = -5%
Change 2014-2015 = -9%

December 2016 BHAЕ statewide analysis file
Estimated New HIV Infections and ETE Goals

BHAE Data as of January 2017
Newly Diagnosed HIV Cases by Year of Diagnosis and Transmission Risk, NYS, 2010-2015

December 2016 BHAЕ statewide analysis file
Newly Diagnosed HIV Cases by Year of Diagnosis and Transmission Risk, NYS, 2010-2015

MSM new diagnoses
Change 2010 – 2015: -2%
Change 2014 – 2015: -11%

December 2016 BHAEE statewide analysis file
Number of HIV Positive Newborns in NYS by Year, 1990 – 2015: Elimination Criteria Met!

- * 1990 – 1993 estimated based on 25% transmission rate
- ** 1997 data includes February to December births
- ≈ Gap in years where data are unavailable
Viral Suppression among Persons Living with Diagnosed HIV Infection at the End of 2015 by Race/Ethnicity and Transmission Risk Group, New York State

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>% Viral Suppression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Hispanic White</td>
<td></td>
</tr>
<tr>
<td>Non-Hispanic Black</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td></td>
</tr>
<tr>
<td>Asian, Pacific Islander</td>
<td></td>
</tr>
<tr>
<td>Native American*</td>
<td></td>
</tr>
<tr>
<td>Multi-race**</td>
<td></td>
</tr>
<tr>
<td>NYS Average 67%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transmission Risk</th>
<th>% Viral Suppression</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSM</td>
<td></td>
</tr>
<tr>
<td>IDU</td>
<td></td>
</tr>
<tr>
<td>MSM/IDU</td>
<td></td>
</tr>
<tr>
<td>Heterosexual</td>
<td></td>
</tr>
<tr>
<td>Blood Products</td>
<td></td>
</tr>
<tr>
<td>Pediatric Risk</td>
<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
</tr>
</tbody>
</table>

1Data as of January 2017

*Native American percentage is based on a small number of people (n=37).
**Multi-race percentage may be artificially inflated as an artifact of CDC’s algorithm for inferring Multi-race.
What actions are we taking?
Recent Progress: ETE Blueprint Crosswalk

HIV Uninsured Care Programs
- Served more than 24,000 people in 2016.

New York State leads the nation in PrEP use in high-risk populations
- Prescriptions for PrEP increased fourfold among Medicaid enrollees in 2016

Statewide PrEP Promotion Campaign
- Pharmacists can dispense 7-day starter packs of nPEP

Legislation Passed to Streamline HIV Testing
- Removal of written consent: provider can advise; patient can opt out
- Minors can now give informed consent for treatment

BP1: Make routine HIV testing truly routine
BP8: Support the non-medical needs of all PLWH
BP12: Statewide programs for distribution and increased access to PrEP & nPEP

BP4: Improve referral and engagement
BP5: Continuously act to monitor and improve rates of viral suppression

Statewide Quality of Care Program
- Served more than 24,000 people in 2016.
- Prescriptions for PrEP increased fourfold among Medicaid enrollees in 2016
- Expanding across New York State

Rapid Access to Treatment pilot program
- Expanding across New York State
New Initiatives: Key Populations

- Expand targeted health care services to Young MSM through funding enhancements to the Youth Access Programs (YAPs) allowing for increased outreach, improved linkage to continuous HIV care and treatment, and averted new infections.

- Fund Transgender Health Care Services to meet the prevention, health care, mental health, medical case management and other supportive services needs of transgender individuals.

- Implemented Centers of Excellence for Drug User Health, known as hubs, to address the intersection of the opioid and AIDS epidemics.
## Targeting Viral Load Suppression: Using Multiple Data Sources

### SUMMARY OF MEDICAID MATCH DATA FOR ENDING THE AIDS EPIDEMIC (ETE) PILOT

<table>
<thead>
<tr>
<th>Description</th>
<th>Members</th>
<th>Percent</th>
<th>Content Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total NYS HIV/AIDS Medicaid Members Submitted for Match to BHAE</td>
<td>73,125</td>
<td>100%</td>
<td>HIV/AIDS Algorithm</td>
</tr>
<tr>
<td>Remaining Medicaid Members Matched to CDC Confirmed Case (by Bureau of HIV/AIDS Epidemiology (BHAE))</td>
<td>59,807</td>
<td>82%</td>
<td>Match Rate with BHAE</td>
</tr>
<tr>
<td>Deceased as of 12/31/2014 - Removed (Based on date of death with no paid claims beyond death)</td>
<td>5,623</td>
<td>9%</td>
<td>Deceased Removed</td>
</tr>
<tr>
<td>Remaining Medicaid Members Matched to CDC Confirmed Case with</td>
<td>54,184</td>
<td>91%</td>
<td>Presumed Living</td>
</tr>
<tr>
<td>Total Virally Suppressed between January 2011 and July 2015 (Defined as most recent VL &lt; 200 copies/ml)</td>
<td>41,719</td>
<td>77%</td>
<td>Virally Suppressed</td>
</tr>
<tr>
<td>TOTAL NOT VIRALLY SUPPRESSED* (Defined as: Most Recent VL &gt;= 200 copies/ml OR No VL)</td>
<td>12,465</td>
<td>23%</td>
<td>Not Virally Suppressed</td>
</tr>
<tr>
<td>NOT Virally Suppressed in Medicaid Managed Care (MMC) (Based on any capitation payments January 2014 - July)</td>
<td>8,703</td>
<td>70%</td>
<td>In Managed Care</td>
</tr>
<tr>
<td>NOT Virally Suppressed but NO Plan Affiliation (Possible MMC or Medicaid eligibility issues; about ⅔ are)</td>
<td>3,762</td>
<td>30%</td>
<td>No Plan Affiliation</td>
</tr>
<tr>
<td>NOT Virally Suppressed in MMC Sent to 6 ETE Pilot Plans**</td>
<td>6,441</td>
<td>74%</td>
<td>Sent to Pilot Plans</td>
</tr>
</tbody>
</table>
Between 2012-15, 12,588 unique individuals started PrEP in New York State.

NYS PrEP/PEP Voluntary Directory:

- 2016 analysis showed that PrEP prescribers are present in areas of the state with the highest risk and need for PrEP services.
- As of 2/22/17 the directory has 350 registered PrEP prescribers in 47 counties.
PrEP Access: Upstate & Key Populations

Increasing availability of PrEP in high risk areas by funding STD clinics to provide PrEP:
  • NYS has funded STD clinics in upstate NYS to prescribe PrEP
  • NYC has created sexual health centers (formerly STD clinics) to prescribe PrEP and support PrEP navigators

Investigating new models to increase access to PrEP for hard to reach populations:
  • Telemedicine, Planned Parenthood, Syringe Exchange Programs
How do we know whether we are meeting our goals?
# Measuring Progress: ETE Metrics

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</thead>
<tbody>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10.4%</td>
</tr>
<tr>
<td>2013</td>
<td>2,509</td>
<td>3,391</td>
<td>69%</td>
<td>81%</td>
<td>81%</td>
<td>66%</td>
<td>92%</td>
<td>21.7%</td>
<td>736</td>
</tr>
<tr>
<td>2014</td>
<td>2,497</td>
<td>3,443</td>
<td>72%</td>
<td>81%</td>
<td>84%</td>
<td>68%</td>
<td>92%</td>
<td>19.6%</td>
<td>674</td>
</tr>
<tr>
<td>2015</td>
<td>2,436</td>
<td>3,155</td>
<td>73%</td>
<td>81%</td>
<td>85%</td>
<td>69%</td>
<td>92%</td>
<td>19.4%</td>
<td>612</td>
</tr>
<tr>
<td>2016</td>
<td>2,050</td>
<td>2,911</td>
<td>78%</td>
<td>84%</td>
<td>87%</td>
<td>73%</td>
<td>93%</td>
<td>18.4%</td>
<td>536</td>
</tr>
<tr>
<td>2017</td>
<td>1,750</td>
<td>2,620</td>
<td>81%</td>
<td>86%</td>
<td>89%</td>
<td>76%</td>
<td>94%</td>
<td>17.6%</td>
<td>461</td>
</tr>
<tr>
<td>2018</td>
<td>1,410</td>
<td>2,253</td>
<td>84%</td>
<td>88%</td>
<td>91%</td>
<td>79%</td>
<td>95%</td>
<td>16.7%</td>
<td>376</td>
</tr>
<tr>
<td>2019</td>
<td>1,060</td>
<td>1,870</td>
<td>87%</td>
<td>89%</td>
<td>93%</td>
<td>82%</td>
<td>96%</td>
<td>15.8%</td>
<td>295</td>
</tr>
<tr>
<td>2020</td>
<td>750</td>
<td>1,515</td>
<td>90%</td>
<td>90%</td>
<td>95%</td>
<td>85%</td>
<td>98%</td>
<td>15.0%</td>
<td>225</td>
</tr>
</tbody>
</table>

*VLS: Viral Load Suppression

Source: NYS HIV Surveillance System as of January 2017

Actual | Target | Goal
Measuring Progress: ETE Metrics

- **New infections: incidence (CDC definition)**
  - Reduce the number of new infections to 750 by 2020

- **New infections: reported new diagnoses**
  - Reduce the number of new diagnoses reported by 55% (NHAS goal: 25%)

- **Linkage: standard cascade definition of 30 d measured by lab test**
  - Increase percentage of newly diagnosed patients linked to care to 90%

- **Receiving any care: evidence of lab test**
  - Increase percentage from 81% to 90% by 2020

- **Viral suppression**
  - Increase percentage of PLWDHI with VLS 85% (NHAS 2020 Goal: 80%)
  - Increase the percentage of PLWDHI who receive care with VLS from 85% to 95% by 2020.
Measuring Progress: ETE Metrics (2)

- **Aware of HIV status: (estimates calculated from CDC and seroprevalence studies)**
  - Increase the percentage of PLWH who know their serostatus to at least 98%. (NHAS 2020 Goal: 90%)

- **Concurrent AIDS diagnosis**
  - Reduce the proportion of persons with a diagnosis of AIDS within 30 days of HIV diagnosis to 15% by 2020

- **Time to AIDS diagnosis**
  - Reduce the rate at which persons newly diagnosed with HIV progress to AIDS by 50%.
Receiving Any Care: Example of annual targets

By the end of 2020, increase the percentage of persons living with diagnosed HIV infection who receive any care to 90%.

Measure: Any VL, CD4 or genotype test in NYSDOH HIV Surveillance System in a calendar year.
How do we work with our stakeholders across New York State? Community Input and Collaboration

ETE Activities Report

GET TESTED. TREAT EARLY. STAY SAFE.

Let’s End AIDS, Long Island.

GET TESTED. TREAT EARLY. STAY SAFE.

End AIDS.

GET TESTED. TREAT EARLY. STAY SAFE.

Let’s End AIDS, Western NY.

ETE Advisory Groups to develop implementation strategies

- Transgender and Gender Non-Conforming Individuals
- Older Adults
- Women
- Spanish-Speaking Communities
- Black MSM
- Latino Gay and Bisexual Men
- Young Adults
- STDs
- Data Needs
- Pharmacy
- Persons Who Use Drugs
Ending the Epidemic
The Regional Approach

- Convened stakeholder meetings in 13 regions in partnership with local health departments resulting in Regional Steering Committees across NYS that developed implementation plans in their respective regions

- Foster coordination among regional service providers and networks through:
  - NYLinks: regional quality improvement networks focusing on linkage, retention and viral suppression
  - NYKnows: NYC initiative to promote universal testing
Rochester, NY

Background

- MCPETE launched as a result of NY Links Sustainability Planning
- Needed a shared leadership, public health approach to sustain regional group activities

Accomplishments

- Identified and prioritized regional gaps and needs
- Established key partnerships (clinical and non-clinical) to meet regional objectives
- Developed measurable outcomes to monitor progress
- Utilized QI methodology to maximize growth, progress and change
- Formalized action steps by developing Commitment Plans
Agency Commitment Plans specify in detail what and how partners will contribute to MCPEtE objectives:

- Same day access to care for newly diagnosed patients
- Mobile Unit Access
- Outreach to homeless shelters
- Collaboration to accelerate referrals from non-medical service agencies
- Finding HIV positive individuals who may be out of care
The New York City EtE Plan: Strategies to Address Disparities

2. Make Sexual Health Clinics Efficient Hubs for HIV Treatment and Prevention

5. Take NYC Viral Suppression from Good to Excellent

6. Make NYC Status Neutral

#EndAIDSNY2020
Proportion of HIV-Infected People in NYC Engaged in Selected Stages of the HIV Care Continuum

Of the approximately 87,000 people infected with HIV in NYC in 2014, 72% had a suppressed viral load.

Viral suppression is defined as viral load ≤200 copies/mL.

For definitions of the stages of the continuum of care, see Technical Notes.

As reported to the New York City Department of Health and Mental Hygiene by June 30, 2015.
How do we involve the care and treatment community?
Linking population health data and quality improvement
...and

Linking quality improvement with public health outcomes
Why an organizational cascade?

1. To monitor the extent and quality of care being delivered to *all* HIV-positive patients seen in a facility, and not just those that are actively engaged in its HIV program.

2. To identify gaps in the sequences of steps between diagnosis and viral load suppression as they are represented by the cascade.

3. To develop data-driven plans to assess progress in providing care, identifying gaps in care, and driving improvements to address these gaps through quality management programs and QI activities.
What is required for the submission?

- New patient cascade
- Established patient cascade
- Methodology
- Improvement plan
What’s different about these organizational cascades?

- Open patients
- Linkage to care in 3 days
- No retention measure
Organizational cascades: it’s all about improvement

- **Linkage:**
  - meeting with provider on same day of positive test result
  - work with other hospital units to develop notification system when HIV patients are accessing their services
  - construct database to extract information about patients with HIV diagnosis who access any service in the hospital

- **Viral suppression:**
  - structured care field to document external, to retention/adherence program, to chronic disease self-management program, peer program
  - incentives for VLS

- **ART**
  - communicate refill policy that includes appointment scheduling to all medical staff
  - develop same-day treatment strategy
HIV Cascade of Interventions
Resources for Improvement

TESTING
- Universal:
  - Opportunistic testing (20) (A1)
  - Active choice testing (2)
  - Self-testing (20) (B1)
- Community-based testing: multi-disease prevention campaigns (1,5.6,8,13,14,19.20) (A1)
- Partner notification and referral to testing (1) (A1)
- Testing in workplaces and institutional settings, including prisons, military, police, and educational venues, and mining/trucking companies (5,6,7,11,14.23) (B1)
- Domestic:
  - Pharmacy-based testing (1,5,16)
- International:
  - Community-based testing: home-based (5,6,13,14,15,23) (A1)
  - Community-based testing: mobile testing (5,6,13,14,23) (A1)
  - Peer-led testing (14)
  - Routine testing for pregnant women (18)

LINKAGE
- Universal:
  - Co-locating medical services for onsite testing and medical care (20) (A1)
- Domestic:
  - ARTAS case management (1,4,8,9) (B1)
  - HIV clinic-based linkage to care team (20) (A1)
  - Systems-based case management (1,8,10,16)
  - Outreach workers (1,9,15,22)
  - Youth-targeted interventions (1,8,15,19,22)
  - Patient navigation (1,9,13)
- International:
  - Extended home visit counseling (9,10)
  - Food incentives (19)
  - Immediate initiation of ART counseling and testing (1,12,13,23) (A1)
  - Peer home visits post-diagnosis (20)

RETENTION
- Universal:
  - Reminders (SMS, call, post mail) within 48 hours (20) (B1)
- Domestic:
  - Clinic-wide messaging (20) (A1)
  - Enhanced personal contact (1,8,13,23)
  - Computer decision-support systems (Virology FastTrack) (29)
  - Medical case management (1,14)
  - Budesonaphine treatment (19)
- International:
  - Peer support (20)

ADHERENCE
- Universal:
  - Computer-based adherence interventions
  - Decentralization of treatment
- Domestic:
  - CHW-based motivational interviewing (12)
  - Coping and self-management of treatment side effects (20)
  - Monetary reinforcement
  - Personalized cell phone reminder system
  - Pillboxes
- International:
  - Community-based ART
  - Community-based adherence clubs
  - Counseling and alarm devices
  - Directly administered ART
  - Individually tailored DOT with economic and psycho-social support (10)
  - Health workers
  - Online self-management
  - Phone calls and home visits (19)
  - Task shifting and community involvement
  - Text message reminders

*See reverse for numbering and
How are we telling our story?
Ending the Epidemic Dashboard

http://www.ETEdashboardny.org

In partnership with CUNY School of Public Health Institute for Implementation Science
Thank you

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