**Recommendation Title:** Enhance the Collection and Use of HIV Phylogenetic Data To Improve Surveillance and Better Target HIV Prevention Services

1. **For which goal outlined in the Governor’s plan to end the epidemic in New York State does this recommendation apply?** 1,2 and 3

2. **Proposed Recommendation:** Enhance the collection and use of HIV phylogenetic data to improve surveillance and better target prevention services. Using routine HIV genetic data gathered at time of diagnosis, New York State has the largest collection of HIV genetic data from any single jurisdiction in the country. Approximately 60% of newly-diagnosed New Yorkers have their HIV protease and integrase genes sequenced to provide baseline drug-resistance information to guide therapeutic options. These data can be used to map clusters of ongoing HIV transmission and – by intervening into those clusters where recent HIV infection has occurred and prioritizing these ‘hotspots’ for PrEP and Treatment as Prevention (TasP) – can help to reduce ongoing HIV transmission and incidence, as is being done at University of California, San Diego by Susan Little’s group with computational expertise from Joel Wertheim, who is also working with New York City Department of Health and Mental Hygiene on the New York City genetic data. Other researchers such as Erik M. Volz (Imperial College, London) and Tanja Stadler (UTH, Zurich) are also using this approach. The Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM) is exploring this approach to mapping incidence and rapidly increasing antiretroviral therapy (ART) coverage to reduce new infections in global settings. The New York State Department of Health, New York City Department of Health and Mental Hygiene, Treatment Action Group, and AIDS Coalition to Unleash Power (ACT UP) New York have begun discussions about how to implement this in New York State.

**List of key individuals, stakeholders, or populations who would benefit from this recommendation**

- People at risk for HIV
- Individuals with HIV
- Providers

3. **Would implementation of this recommendation be permitted under current laws or would a statutory change be required?** Permitted under current law. Widespread community education including protection of patient confidentiality privacy, and community support will be key. New funding will be needed.
4. Is this recommendation something that could feasibly be implemented in the short-term (within the next year) or long-term (within the next three to six years)? Within the next year.

5. Please list the TF numbers of the original recommendations that contributed to this current version: TF99.