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HIV CARE & TREATMENT

Lessons Learned from Linking Data From The Massachusetts HIV/AIDS Drug Assistance Program (ADAP) with HIV Surveillance Data to Improve Health Outcomes in Massachusetts

Massachusetts Department of Public Health (MDPH)
Bureau of Infectious Disease and Laboratory Sciences

Nina Kishore and Annette Rockwell

Learning Objectives



1. Analyzing key demographic differences in ADAP enrollment
2. Understanding differences in HIV care markers for Massachusetts by enrollment status in ADAP
3. Determining key aspects of ADAP services essential for improved engagement, retention and viral suppression

ADAP in Massachusetts



- MDPH considers a robust ADAP to be essential to engaging HIV+ individuals in care, improving health outcomes for PLWHA, & affecting rates of HIV transmission through affecting viral suppression rates
- HIV-positive individuals are eligible if they live in Massachusetts and meet income eligibility guidelines (an income of <500 % of the federal poverty level (FPL) with an allowance per dependent)
- State subcontracts out the administration of the program to Community Research Initiative of New England (CRI), a community based organization
- The program assists low income HIV+ residents of Massachusetts in three ways:
 - 1) Pays full cost of medications for HIV+ individuals who are uninsured or incarcerated in the county houses of corrections (short term incarcerated);
 - 2) Provides insurance continuation for HIV+ individuals by paying insurance premiums; and
 - 3) Assists insured HIV+ individuals with prescription copays

ADAP in Massachusetts Cont.



- Program has maintained an “open formulary” since 2001 (when state’s 1115 Medicaid Waiver was expanded to include HIV+ individuals up to 200% FPL)
- An important component of the program, that was implemented in 2014, is the BRIDGE (Benefits Resources Infectious Disease Guidance & Engagement) Team
- To better monitor adherence-related outcomes, MA requested to use HRSA’s ADAP “flexibility policy” to support a “match” between HDAP & state surveillance data from eHARS

Matching ADAP and HIV Surveillance Data



- CRI maintains the ADAP enrollment database and provides periodic aggregate data to the Massachusetts Department of Public Health on a monthly basis, or as requested
- ADAP enrollment data from April 18, 2019 for current enrollees and historical enrollees was matched with MDPH HIV Surveillance data from the same period using different combinations of Names, Gender, and Dates of Birth, SSN
- The purpose of this match was to understand:
 - 1) How many HIV positive individuals in MA are utilizing ADAP?
 - 2) Among PLWHA in MA, what can we understand about those who are using ADAP (Learning Objective #1)
 - 3) Do those who use ADAP services have better HIV care measures than those who do not? (Learning Objective #2)
 - 4) What can we learn to improve ADAP? (Learning Objective #3)
- Statistical X^2 tests were performed to determine if differences between groups were statistically significant

Massachusetts HIV/AIDS Epidemic



Massachusetts (as of January 1, 2020)

21,792	Living with HIV/AIDS
662	New diagnoses reported in 2018
<20	Most recent median viral load
591	Most recent median CD4
36,639	Cumulative total of individuals diagnosed & reported with HIV/AIDS in MA
14,847	Deaths

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 01/01/20

Learning Objective #1

Analyzing key demographic differences in ADAP enrollment

Current Utilization of ADAP in Massachusetts



How many HIV+ individuals in MA are currently utilizing ADAP as of April 18, 2019?

- **22,493** HIV positive individuals were identified as currently living in Massachusetts as of May 1, 2019 based on HIV Surveillance Data
- **5,873** HIV positive individuals were enrolled in ADAP in Massachusetts on April 18, 2019 according to the CRI database enrollment data (enrollees must recertify every 6 months to maintain enrollment)
 - **99.1%** match between current ADAP enrollees and HIV Surveillance Registry data as of May 1, 2019
- **25.9%** of HIV positive individuals living in MA as of May 1, 2019 are enrolled in the ADAP program

Demographic Differences in ADAP Enrollment in MA



How do those who are currently enrolled in ADAP on April 18, 2019 differ from the other PLWHA in MA not enrolled in ADAP? (Learning Objective # 1)

Demographic Data	ADAP Enrollee Profile Compared to HIV Surveillance Registry Data		p Value
Gender	↑ Females	↓ Men	<0.0001
Race/Ethnicity	↑ Hispanic/Latino	↓ Black (not Hispanic)	<0.0001
Place of Birth	↑ Non US Born	↓ US Born	<0.0001
Exposure Mode	↑ Heterosexual Exposure	↓ MSM	<0.0001
Current Age	↑ Age 60+	↓ Under Age 50	<0.0001
Years Since Diagnosis	↑ <5 years since Dx	↓ 6-10 years since Dx	<0.0001

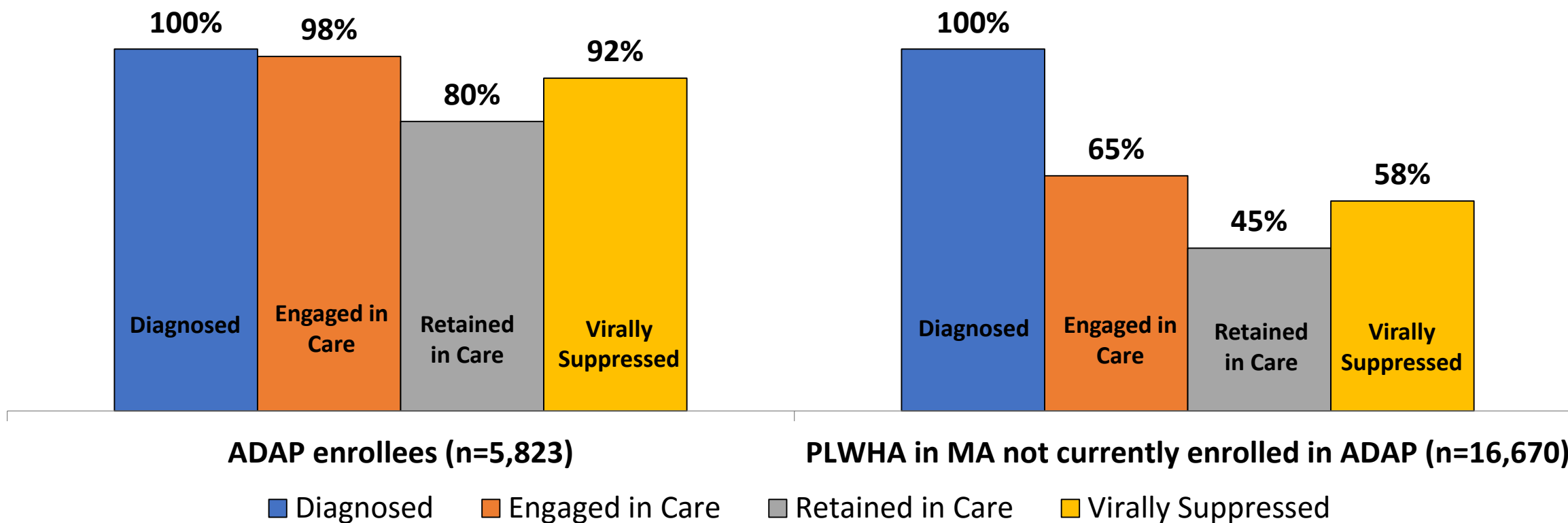
Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 01/01/20

Learning Objective #2

Understanding differences in HIV care markers for Massachusetts by enrollment status in ADAP

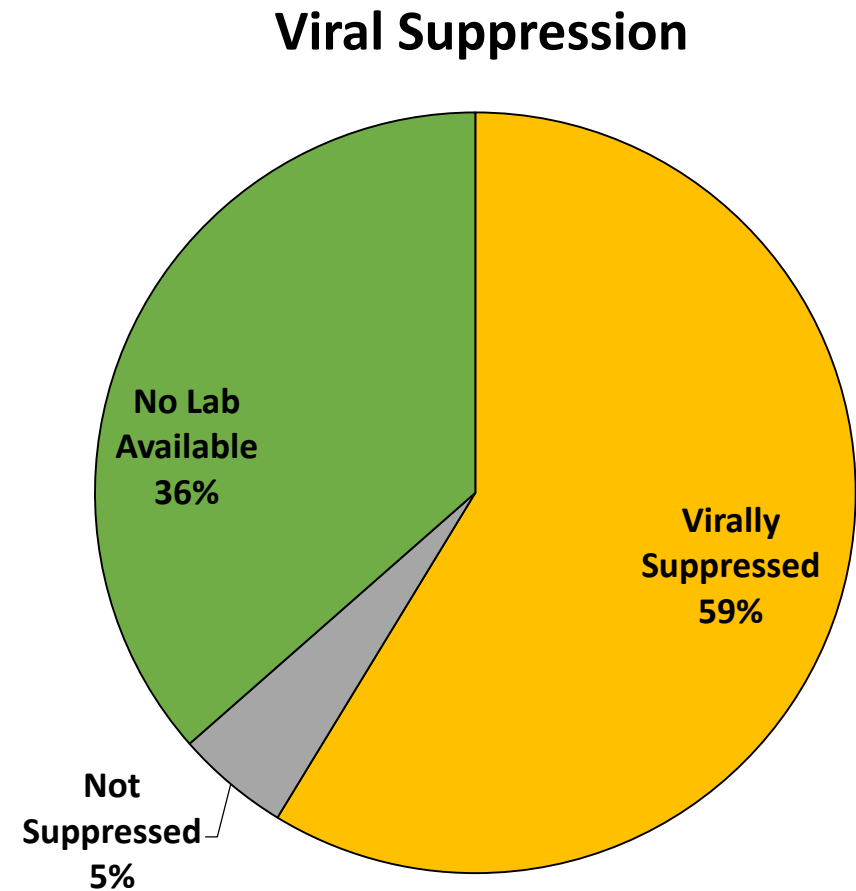
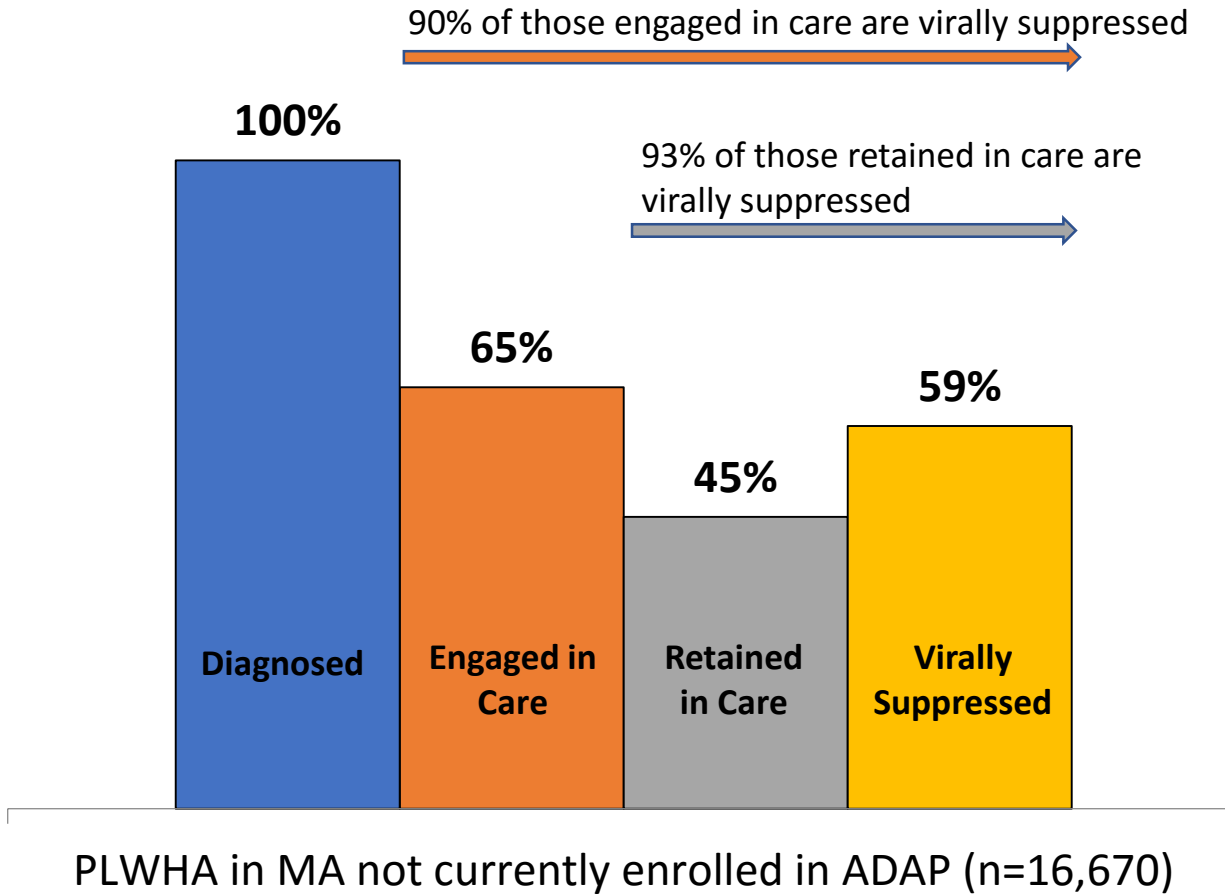
HIV Care Continuum in Massachusetts

HIV Care Continuum for ADAP enrollees as of April 18, 2019 compared to PLWHA in MA who are not enrolled in ADAP during this time with labs between May 1, 2018 to May 1, 2019



Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 01/01/20, Labs between May 2018 - May 2019

HIV Care Continuum in Massachusetts: PLWHA Not In ADAP



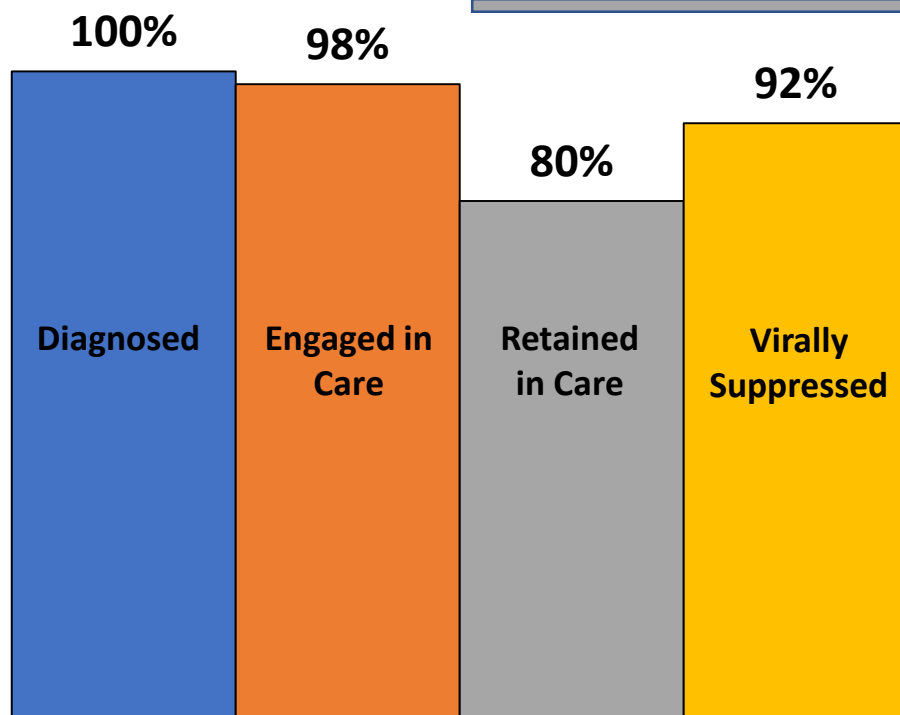
HIV Care Continuum in Massachusetts: ADAP Enrollees



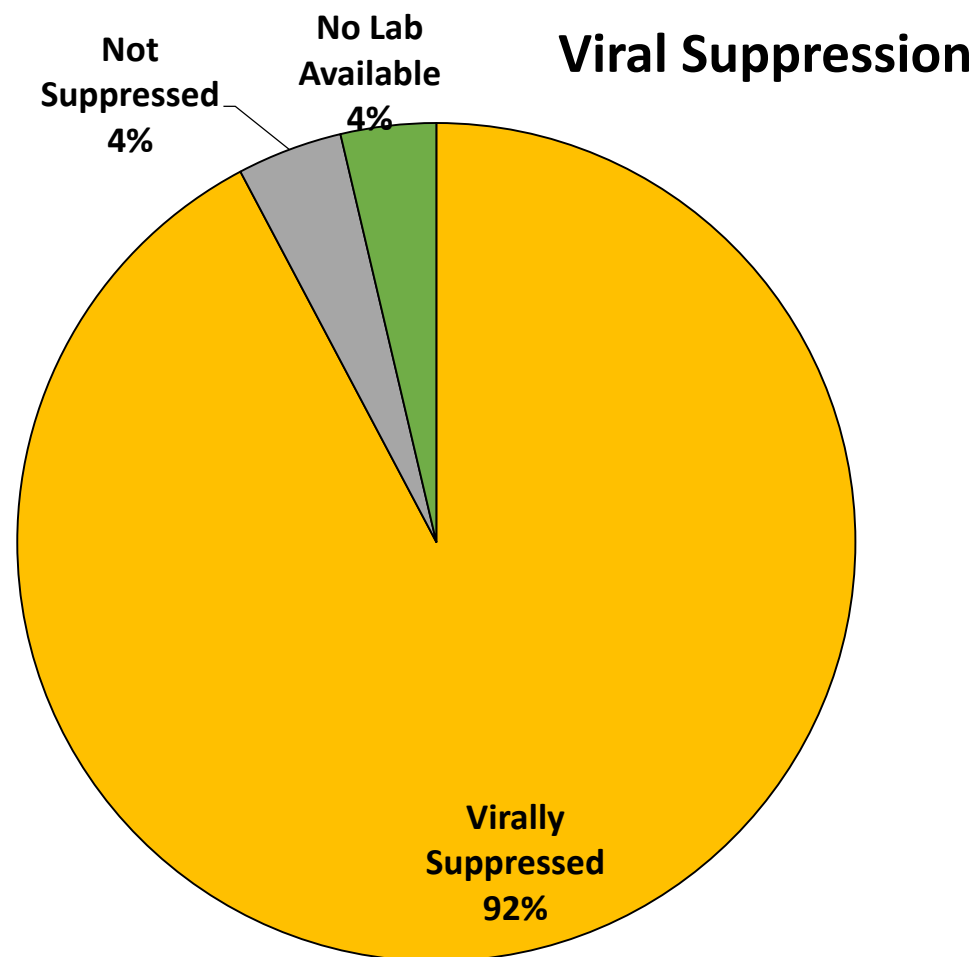
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94% of those engaged in care are virally suppressed

95% of those retained in care are virally suppressed



ADAP enrollees (n=5,823)



HIV Care Markers for ADAP in Massachusetts



Do those who use ADAP services have better HIV care measures than those who do not? (Learning Objective #2)

98% of ADAP Enrollees are Engaged in Care vs. **65%** of the PLWHA in MA who are not enrolled in ADAP

- Engagement in care is indicated by having at least one HIV Viral Load Test or CD4 Test over a 12 month period between May 1, 2018 to May 1, 2019

80% of ADAP enrollees are Retained in Care vs. **45%** of PLWHA in MA who are not enrolled in ADAP

- Retained in care is indicated by having at least two HIV Viral Load or CD4 tests which are at least 3 months apart over a 12 month period between May 1, 2018 to May 1, 2019

92% of ADAP enrollees are Virally Suppressed vs. **58%** of PLWHA in MA who are not enrolled in ADAP

- Viral Suppression (<200 copies/mL) is indicated by the result of the last Viral Load test during the 12 month period between May 1, 2018 to May 1, 2019.

Learning Objective #3

Determining key aspects of ADAP services essential for improved engagement, retention and viral suppression

What We Learned



- **52%** of the HIV positive individuals in Massachusetts since the beginning of the epidemic have used ADAP at some point, illustrating the important part that ADAP plays in ensuring access to medication for PLWHA
- **26%** of the current population of PLWHA in MA are enrolled in ADAP, which indicates the ongoing need for ADAP as an important “safety net below the safety net”, even in state with high rates of insurance coverage and an expanded Medicaid program
- Some demographic differences were found between HIV+ individuals currently enrolled in ADAP and those who were reported living with HIV in MA (ADAP enrollees were more likely to be female, Hispanic/Latino, older, non-US Born, newly diagnosed (<5 years), with heterosexual risk exposure), which may be valuable for targeting outreach around enrollment to particular populations
- Enrollment in ADAP in Massachusetts has been shown to have better HIV care markers, especially for engagement in care, retention in care and viral suppression

Insights about ADAP and HIV Massachusetts



- ADAP is a public health intervention that is vital to preventing the spread of HIV by improving rates of viral suppression among enrollees vs. non-enrollees and therefore lowering the risk of transmission.
- In a state that has maximized access to health care coverage through Medicaid expansion and early adoption of healthcare reform, ADAP has been adapted to be a comprehensive program that includes not only assistance with drug and insurance out of pocket costs for PLWHA, but also provides support around insurance benefits navigation and targeted outreach to individuals lost to care (the BRIDGE program).
- By matching ADAP data with surveillance data we were able to see better care outcomes for enrollees vs. non-enrollees in this type of program, and confirm its effectiveness as a primary public health intervention for care as well as prevention of HIV

Next Steps for ADAP in Massachusetts



- Understanding more about PLWHAs in Massachusetts who are not enrolled in ADAP (geographic location, race/ethnicity, age) to target outreach by the BRIDGE Team
- Regular updates to the data match on an annual basis to understand any changes that may need to be addressed, especially in the context of COVID19
- Consider requiring enrollment in ADAP for all PLWHA accessing RW Part B services due to improved outcomes?

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THANK YOU!

Massachusetts Department of Public Health
Contact Information:

Annette Rockwell - Director of Infectious Disease Treatment Access, Office of HIV/AIDS
Annette.Rockwell@massmail.state.ma.us

QUESTIONS

