Impact of HIV Test-and-Treat Initiative in Miami-Dade County, Florida

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BACKGROUND

- In 2017, there were 1,195 diagnoses of HIV in Miami-Dade County[1], ranking first in the United States for rate of HIV diagnoses per 100,000 population (42.9 per 100,000).[2]
- With 27,969 persons living with HIV in Miami-Dade County in 2017,[1] antiretroviral therapy (ART) is pivotal in the treatment and prevention of HIV.
- Rapid access to ART immediately following HIV testing is upheld as a prevention tool to reduce HIV. transmission and improve outcomes along the HIV care continuum.
- In 2016, the Miami-Dade County Health Department (CHD) launched a test-and-treat (T&T) initiative to offer same-day or next-day access to ART following the initial HIV diagnosis, provide linkage to HIV care and connect patients to Ryan White and AIDS Drug Assistance Programs as needed.
- This study aims to compare HIV care outcomes for patients enrolled in T&T and patients not enrolled T&T in Miami-Dade County.

METHODS

- HIV care outcomes among antiretroviral-naïve patients living in Miami-Dade County whose HIV was diagnosed in 2017 and who engaged in HIV care (n=919), including patients in T&T (n=81), were evaluated.
- Clinical and epidemiological data reported to the Florida Department of Health HIV surveillance system through 12/31/2018 were matched to lab, medical visit and prescription pickup records in Ryan White and AIDS Drug Assistance Program databases, county health department electronic health records and Medicaid claims.
- HIV care outcomes included
  - Care initiation within 30 days of diagnosis
  - Viral load (VL) suppression (<200 copies/mL) within 6 months and 12 months of diagnosis
  - Retention in HIV care (two or more HIV-related labs, medical visits or prescriptions at least three months apart) within 12 months of diagnosis
  - HIV drug resistance testing within 3 months of diagnosis.
- Patients with an undetectable VL within 14 days of diagnosis were excluded from the analyses.
- Statistical analyses were performed using SAS 9.4

RESULTS

Table 1: Demographics of Persons with Diagnosed HIV in Miami-Dade County, 2017

		T&T	Non-T&T	Total
Sex	Female	19 (23.5%)	166 (19.8%)	185
	Male	62 (76.5%)	672 (80.2%)	734
Race/ Ethnicity	White	6 (7.4%)	69 (8.2%)	75
	Black	27 (33.3%)	272 (32.5%)	299
	Hispanic	46 (56.8%)	493 (58.8%)	539
	Other	2 (2.5%)	4 (0.5%)	6
Age at HIV Diagnosis	<13	0 (0.0%)	2 (0.2%)	2
	13-19	1 (1.2%)	31 (3.7%)	32
	20-29	21 (26.9%)	237 (28.3%)	258
	30-39	29 (35.8%)	256 (30.6%)	285
	40-49	15 (18.5%)	135 (16.1%)	150
	50-59	10 (12.4%)	115 (13.7%)	125
	≥60	5 (6.2%)	62 (7.4%)	67
Transmission Category	MSM	52 (64.2%)	537 (64.1%)	589
	IDU	1 (1.2 %)	9 (1.1%)	10
	MSM/IDU	0 (0.0%)	5 (0.6%)	5
	Heterosexual	28 (34.6%)	285 (34.0%)	313
	Other risk	0 (0.0%)	2 (0.2%)	2
	Total	838	81	919

MSM = Men who have sex with men; IDU = Injection drug use

Figure 1: HIV Care Outcomes by T&T Status in Miami-Dade County, 2017

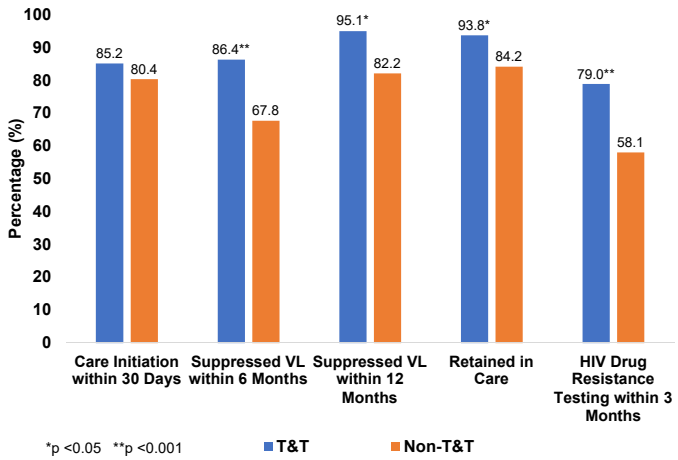
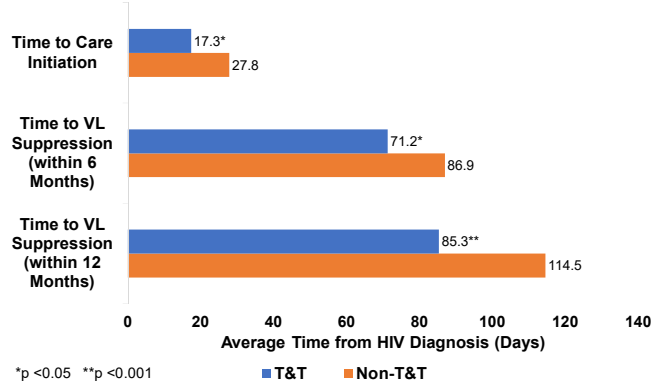


Figure 2: Time from HIV Diagnosis to Care Initiation and VL Suppression in Miami-Dade County, 2017



CONCLUSIONS

- Patients in T&T initiated care an average of 10 days earlier than other patients (p<0.05). However, T&T did not significantly impact the rate of HIV care initiation within 30 days of diagnosis (85.2% vs. 80.4%).
- Patients in T&T were more likely to achieve VL suppression within six months of diagnosis (86.4% vs. 67.8%, p<0.001) and be retained in care (93.8% vs. 84.2%, p<0.05).
- For patients with a suppressed VL within 6 months of diagnosis, the average number of days from diagnosis to VL suppression was lower for T&T (71.2 vs. 86.9, p<0.05). When evaluating patients retained in care, higher rates of VL suppression (89.5% vs. 76.9%, p<0.05) persisted for T&T (data not shown).
- Furthermore, patients in T&T were more likely to receive HIV resistance testing within three months of diagnosis (79.0% vs. 58.1%, p<0.001), indicating a complete initial HIV care assessment.
- T&T did significantly impact the timing of HIV care initiation and patients in T&T were more likely to achieve VL suppression within six months of diagnosis and progress to VL suppression more rapidly.
- Rapid access to ART following HIV diagnosis can help reduce HIV-related mortality, improve health outcomes of those living with HIV and reduce HIV transmission through VL suppression.

Limitations: Lab and care event monitoring varies by patient and did not occur at consistent time intervals for all patients. Patients enrolled in T&T received regular monitoring and follow-up while patients receiving care from other providers may not have received the same frequency of care. Furthermore, specific lab tests may not have been reported during the study time period leading to an underreporting of HIV care.

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References:
[1]www.flhealthcharts.com/charts/OtherIndicators/NonVitalHIVAIDSViewer.aspx?cid=0471 Accessed February 1, 2019
[2]Centers for Disease Control and Prevention. *HIV Surveillance Report*, 2017; vol. 29. http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html. Published November 2018. Accessed February 1, 2019.

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