ASSESSMENT OF IMMEDIATE INITIATION OF ANTIRETROVIAL THERAPY IN NYC

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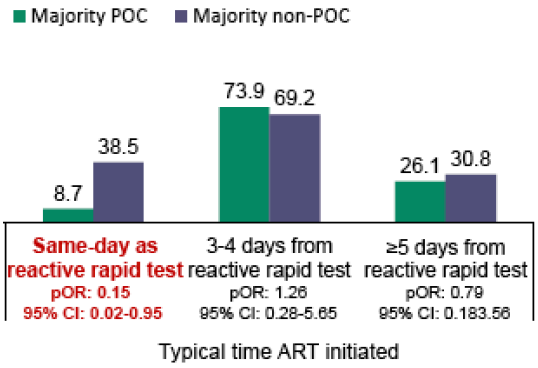
Reported by Jules Levin

Daniel F. Bertolino1, Erica D'Aquila1, Nadia Nguyen2, Denis Nash3, Abigail Baim-Lance3, Bisrat Abraham1,4
1New York City Department of Health and Mental Hygiene, New York City, USA, 2HIV Center for Clinical & Behavioral Studies, New York State Psychiatric Institute and Columbia University, New York City, USA,
3City University of New York Institute for Implementation Science in Population Health, New York City, USA, 4Weill Cornell Medicine, Division of Infectious Diseases, New York City, USA



people of color [POC] versus non-POC

CONCLUSIONS

- High levels of knowledge observed around the benefits of immediate initiation of ART
- Agreement that ART should be initiated soon after a reactive rapid HIV test
  - Concerns remain around initiating treatment prior to receiving confirmatory HIV test results
- Initiation within 3-4 days of a reactive rapid test more commonly reported than same-day initiation
  - Disparities in access to same-day ART initiation may exist across racial and ethnic demographics in NYC
- Support to alleviate logistic barriers is needed to expand ART access, with a focus on achieving health equity

Providers in NYC have high levels of knowledge and acceptance around immediate initiation of ART, with initiation within 3-4 days of a reactive rapid HIV test more commonly practiced than same-day initiation

program abstract

Background: Rapid or immediate initiation of antiretroviral therapy (iART) after a positive HIV test has been shown to decrease time to viral suppression (VS), in turn reducing transmission of HIV. New York City (NYC) and New York State (NYS) have expanded access to iART for people living with HIV (PLWH) through targeted programs at clinics in NYC. We

evaluated iART knowledge, attitudes, and practices among clinical and non-clinical staff in NYC clinics, as well as barriers and facilitators to iART implementation.

Methods: We recruited at least one clinical (i.e., medical provider) and one non-clinical (i.e., administrator or social service provider) staff member to complete an online survey from a purposive sample of 30 NYC clinics providing primary care to one or more PLWH. Clinics were selected to ensure a diverse representation of health outcomes (e.g., clinic VS), clinic resources (e.g., iART funding) and clinic location and type (e.g., borough, hospital-based clinic). Descriptive and bivariate analyses were performed on collected data.

Results: We received 46 survey responses, representing 25 NYC clinics, 98% of which reported prior knowledge of iART. Over 80% of respondents identified iART as decreasing time to VS and increasing patient retention. Overall, 80% and 67% of respondents agreed that ART should be initiated on the same-day or within three to four days of a positive HIV test, respectively. Conversely, 51% of respondents believed ART should not be initiated prior to confirmatory test results, with non-clinical staff being more likely to hold this belief (odds ratio [OR]: 4.64, 95% confidence interval [CI]: 1.24-17.37). Among all respondents,66% reported zero to four days as the typical length of time from a positive HIV test to ART initiation. **Clinics serving a majority people of color were less likely to meet the same-day benchmark** (OR: 0.15, 95% CI: 0.02-0.95). Commonly reported facility-level and patient-level barriers to iART included: **insurance barriers (76%), medication prior authorizations (50%), financial barriers (46%), and concern about false positives (37%).** ART medication starter packs (63%) and patient education materials (52%) were the most commonly reported facilitators to iART.

Conclusion: Despite high levels of knowledge around the benefits associated with iART, it is not yet the standard of care across NYC clinics. The proven benefits of iART warrant further efforts to overcome barriers to implementation, with a focus on achieving health equity.

Table 1. Knowledge, attitudes, and practice around immediate initiation of antiretroviral therapy (iART) by staff role and clinic-level patient demographics

		Staff Designation			Patient Demographics		
		Non-clinical Staff N=26 % (n)	Clinical Staff[a] N=20 % (n)	OR (95% CI)	Majority POC[b] N=28 % (n)	Majority Non-POC[a,b] N=14 % (n)	OR (95% CI)
Knowledge	**iART impact on time to viral suppression:**						
	Increases	14.3 (3)	0.0 (0)	---	4.2 (1)	14.3 (2)	---
	Decreases	85.7 (18)	100 (20)	---	95.8 (23)	85.7 (12)	3.83 (0.31-46.69)
	iART impact on patient retention:						
	Increases	90.5 (19)	94.7 (18)	0.53 (0.4-6.34)	92.0 (23)	91.7 (11)	1.05 (0.09-12.81)
	Decreases	4.8 (1)	0.0 (0)	---	4.0 (1)	0.0 (0)	---
	Does not impact	4.8 (1)	5.3 (1)	---	4.0 (1)	8.3 (1)	---
Attitudes	**Agree with initiating ART[c]:**						
	Same-day as reactive test	78.3 (18)	89.5 (17)	0.42 (0.07-2.48)	84.0 (21)	84.6 (11)	0.95 (0.15-6.06)
	Within 3-4 days of reactive test	62.5 (15)	79.0 (15)	0.44 (0.11-1.76)	68.0 (17)	71.4 (10)	0.85 (0.20-3.56)
	Before confirmatory test	68.2 (15)	31.6 (6)	**4.64 (1.24-17.37)**	52.0 (13)	41.7 (5)	1.52 (0.38-6.09)
Practice	**Typical time from reactive rapid test to ART initiation:**						
	0-4 days	19.1 (4)	21.1 (4)	0.88 (0.19-4.16)	8.7 (2)	38.5 (5)	**0.15 (0.02-0.95)**
	≥5 days	81.0 (17)	79.0 (15)	---	91.3 (21)	61.5 (8)	---

[a]Referent group

[b]POC = People of Color

[c]Respondents were asked to indicate their level of agreement with initiating ART at various time points using the following response options: strongly agree, agree, disagree, strongly disagree, not sure, and prefer not to answer. Data presented in the table represents dichotomization of collected responses (agreement vs. disagreement).

BACKGROUND

- Rapid or immediate initiation of antiretroviral therapy (ART) after a positive HIV test has been shown to decrease time to viral suppression (VS), in turn reducing transmission of HIV.
- New York City (NYC) and New York State (NYS) have expanded access to immediate ART for people living with HIV (PLWH) through targeted programs at clinics in NYC.

METHODS

- **Data Source**
  - Purposive sample of clinical and non-clinical staff in NYC clinics, serving PLWH, who completed an online quantitative survey
- **Clinic Selection**
  - 30 clinics serving PLWH were selected based on the following metrics:
    - Health outcomes (e.g., new HIV diagnoses, VS)
    - Clinic resources (e.g., on-site pharmacy)
    - Clinic location (e.g., borough)
    - Clinic type (e.g., hospital-based location)
- **Participant Recruitment**
  - Current employment at a selected clinic serving PLWH in NYC
  - Recruited at least one clinical (i.e., medical provider) and one non-clinical (i.e., administrator or social service provider) staff member to complete an online survey
- **Immediate ART Assessment**
  - Assessments around immediate initiation of ART included:
    - Knowledge (2 items assessed)
    - Attitudes (3 items assessed)
    - Practices (1 items assessed)
    - Facilitators (16 items assessed)
    - Barriers (16 items assessed)
- **Analysis**
  - Descriptive analyses conducted
  - Multiple bivariate logistic regression models were fit to analyze the association between survey respondent staff position or clinic patient demographics, and knowledge, attitudes, and practices related to immediate initiation of ART.

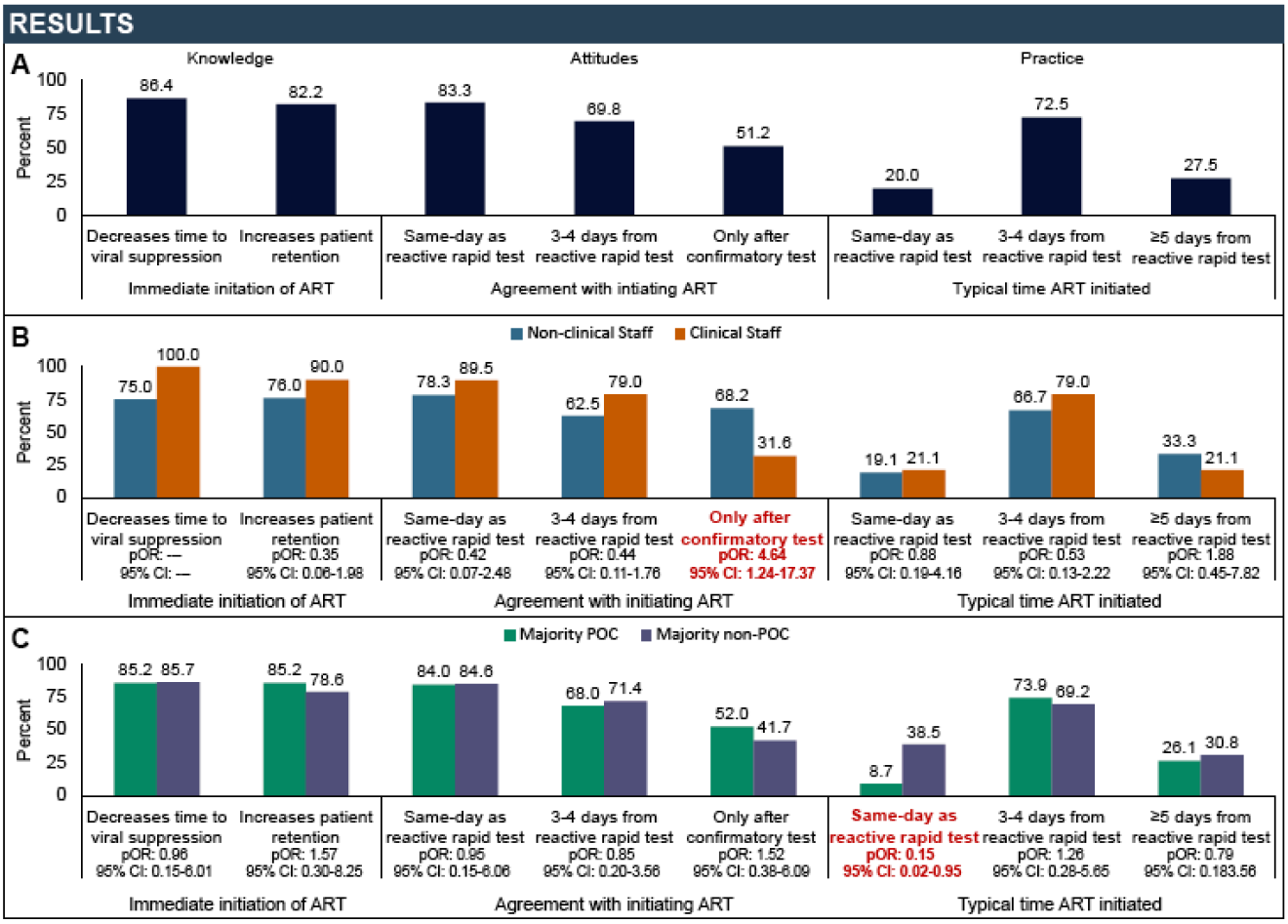


Figure 1. Knowledge, attitudes, and practices related to immediate initiation of ART among a purposive sample of clinical and non-clinical providers (N=46) employed at clinics serving PLWH in NYC, data presented (A) unstratified, (B) stratified by staffing position, and (C) stratified by patient demographics (i.e., majority people of color [POC] versus majority non-POC), when applicable, prevalence odds ratios (pOR) and 95% confidence intervals (95% CI) were calculated, bolded red text indicate significant results at alpha equal to .05

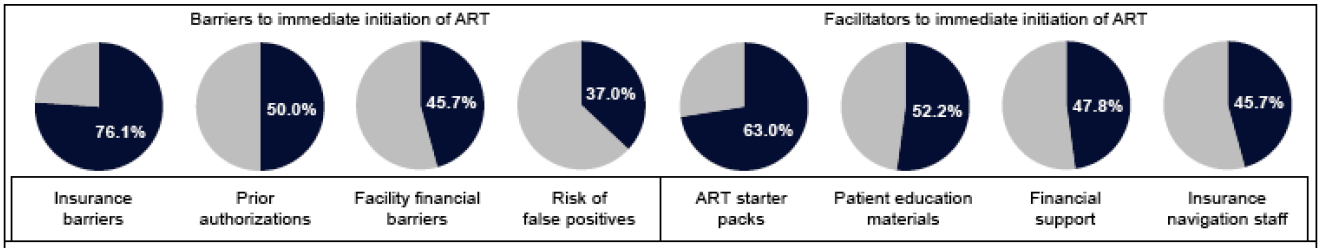


Figure 2. Barriers and facilitators to implementation of immediate ART identified by a purposive sample of clinical and non-clinical providers (N=46) employed at clinics serving PLWH in NYC

PARTICIPANTS

Table 1: Distribution of respondent years of experience and clinic characteristics by dichotomous staff position and reported patient demographics[1]

	Staff Position		
	Clinical (N=20) Mean (SD) or % (n)	Non-clinical (N=26) Mean (SD) or % (n)	*p*
Years Experience	17.6 (9.0)	11.8 (6.0)	0.0498
Clinic Attributes			
Accepting new clients	100.0 (20)	100.0 (26)	---
Rapid testing available	76.9 (20)	95.0 (19)	0.3172
On-site pharmacy	63.2 (12)	48.0 (12)	0.1186
	Patient Demographics[1]		
	Majority POC (N=28) Mean (SD) or % (n)	Majority non-POC (N=14) Mean (SD) or % (n)	*p*
Years Experience	14.2 (8.0)	19.2 (8.9)	0.1106
Clinic Attributes			
Accepting new clients	100.0 (28)	100.0 (14)	---
Rapid testing available	78.6 (22)	92.9 (13)	0.3922
On-site pharmacy	51.9 (14)	71.4 (10)	0.2276

[1]Data obtained from 2016 survey of HIV clinics in NYC

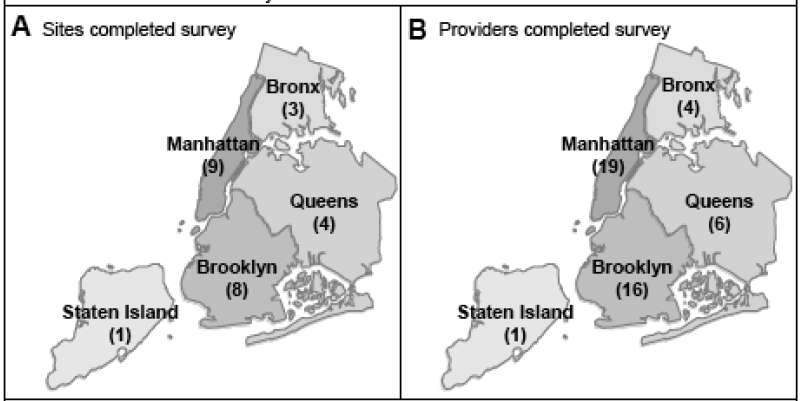


Figure 3. Distribution of completed survey responses in NYC boroughs by (A) number of sites and (B) number of providers