Increased HIV RNA Testing of PrEP Users Following 2021 CDC Guidance: United States, 2019-2023

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Abstract 1253

Background

In December 2021, CDC recommended HIV RNA nucleic acid testing (NAT) in addition to HIV antigen/antibody (Ag/Ab) testing at initiation of long-acting cabotegravir injections (CAB-LA), and for follow-up testing of users of all PrEP regimens.

Methods

Data: HealthVerity eMR Cohort, January 2019 – June 2023

Method:

- Using a validated algorithm to identify persons prescribed antiretroviral drugs for PrEP, we identified all persons prescribed with PrEP and analyzed their HIV Ag/Ab tests and HIV RNA tests during the period from 30 days before the first PrEP Rx to 90 days after the end of the last Rx.
- Tests within 7 days before or after the first PrEP are counted as initiation tests; Tests >30 days after the first PrEP Rx are counted as follow-up tests. A "combined Ag/Ab-NAT" test is defined when one patient received both Ag/Ab and RNA tests within a 7-day interval.
- Among oral PrEP users, we compared change of HIV screening test type of follow-up tests before the CDC PrEP guideline 2021 update (January 2019-December 2021) and after the update (January 2022-June 2023).
- Among CAB-LA PrEP users, we analyzed number and percent of persons who received Ag/Ab and RNA testing around CAB-LA initiation, and during follow-up, respectively.

Results

We identified 10,856 oral PrEP users with follow-up testing during the pre-2021 guideline period; 552 (5%) received combined testing, 613 (6%) had NAT only, and 9,592 (88%) had Ag/Ab testing only. During the post- updated guideline period, among 10,972 oral PrEP users with follow-up tests, 3,109 (28%) received combined testing, 1,068 (10%) had NAT only, and 6,691 (61%) had Ag/Ab only.

Among 691 CAB-LA users with laboratory data; only 130 (19%) received combined testing at PrEP initiation. Among 540 CAB-LA users with follow-up tests, 333 (62%) received combined testing, 118 (22%) had NAT only, and 78 (14%) had Ag/Ab testing only.

Oral PrEP Users

- **Follow-up with Combined HIV RNA-Ag/Ab testing increased substantially after the CDC PrEP Guideline 2021 update, but the RNA test frequencies are still low**

Long-acting Injectable PrEP Users

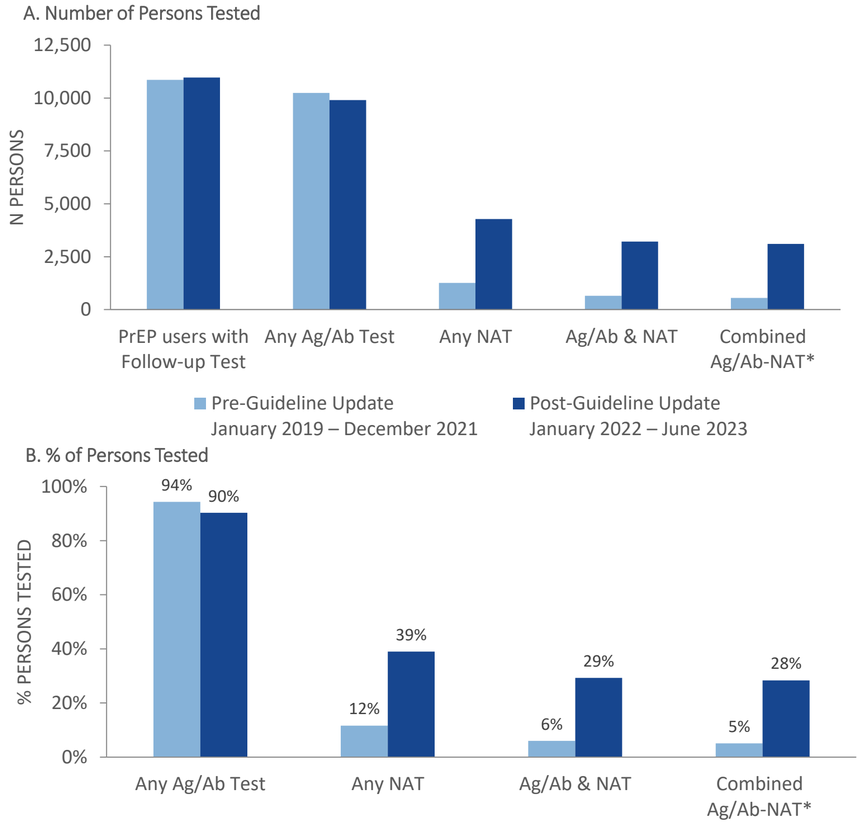
- **<20% of patients received RNA test around initiation of CAB-LA**
- **Nearly 90% received RNA testing or Combined RNA-Ag/Ab testing during follow-up**

Table. Type of HIV Test at PrEP Initiation and Follow-up among Long-acting Injectable PrEP Users, HealthVerity eMR Cohort, January 2022- June 2023

	Total	Any Ag/Ab Test	Any NAT	Ag/Ab & NAT	Combined Ag/Ab-NAT*
Initiation	691	130 (19%)	130 (19%)	130 (19%)	130 (19%)
Follow-up	540	422 (78%)	462 (86%)	344 (64%)	333 (62%)

***Combined Ag/Ab and NAT test: had both types of tests within a 7-day interval. PrEP Initiation test: ±7 days of first CAB-LA Rx; Follow-up test: >30 days after first CAB-LA Rx.**

Figure. Type of HIV Test among Oral PrEP Users Before and After CDC PrEP Guideline Update 2021, HealthVerity eMR Cohort, 2019 - 2023



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