CENTER FOR GLOBAL HEALTH, DIVISION OF GLOBAL HIV AND TUBERCULOSIS

TUBERCULOSIS EVALUATION AMONG HIV-POSITIVE PATIENTS ON ANTIRETROVIRAL THERAPY

00723

Meaghan Peterson[1], Catherine Nichols[2], Rena Fukunaga[1], Sean Cavanaugh[1,3], Patricia Hall[4], Erin Rottinghaus[4], Sarita Shah[1], Adam MacNeil[1]

[1]U.S. CDC, Global Tuberculosis Prevention and Control Branch, Atlanta, [2]USAID, Interagency Collaborative for Program Improvement, Washington DC, [3]Office of the Global AIDS Coordinator, Washington DC, [4]U.S. CDC, International Laboratory Branch, Atlanta

BACKGROUND

- The World Health Organization (WHO) estimates nearly 500,000 unreported cases of TB/HIV each year
- Among people living with HIV (PLHIV), TB symptom screening is recommended at every clinical encounter, followed by sputum testing with Xpert MTB/RIF® for positive screens
- PEPFAR supports antiretroviral therapy (ART) for nearly 15 million PLHIV and endorses these recommendations
- PEPFAR has reported semi-annual data on TB screening and diagnostic testing among new and existing antiretroviral therapy (ART) patients since 2017
- TB symptom screening is positive if one of these four symptoms is present:
  - Cough
  - Fever
  - Night sweats
  - Weight loss

METHODS

- We conducted a descriptive analysis of TB screening and diagnostic testing data from PEFPAR-supported sites from October 2017—October 2019
  - Disaggregated results by patients newly initiating ART vs already receiving ART (≥ 6 months) at time of TB screening
  - Countries reporting this disaggregated data for >90% of TB screening were retained for analysis
  - We determined the proportion of patients screened for TB symptoms and the proportion screened positive
- We then determined what proportion of these positive screens received diagnostic testing, including Xpert MTB/RIF®

RESULTS

- 20/30 (67%) countries reporting TB screening data included in analysis

In the most recent reporting period, in this subset of countries:

- 10,038,506 PLHIV were receiving ART at a PEPFAR-supported site; this number has increased since 2017 **(Figure 1**)
- 81% of existing ART patients and 67% of new ART patients were screened for TB symptoms (**Figure 2**)
- 1.9% of existing ART patients and 5.8% of new ART patients screened positive for TB symptoms (2.3% overall) (**Figure 3**)
- 55% of those who screened positive for TB had a sample sent for Xpert MTB/RIF testing (**Figure 4**)

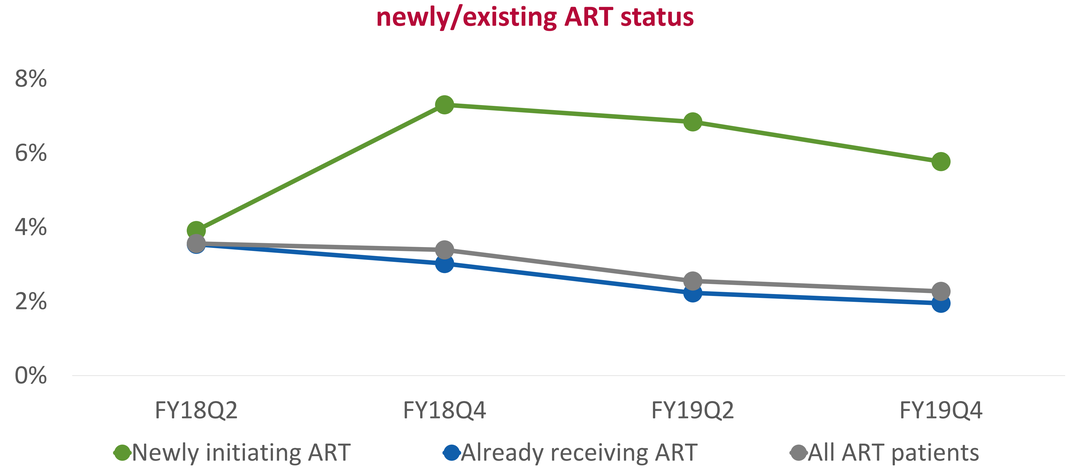
Since October 2017:

- Proportion of ART patients screening positive for TB symptoms has decreased
- Proportion of positive TB screens who received Xpert MTB/RIF diagnostic testing was maintained around 55%

The proportion of ART patients screening positive for TB symptoms has decreased since 2017; 5.8% of new ART patients and 1.9% of existing ART patients screened positive in 2019.

Among ART patients who screened positive for TB, only 55% had a sample sent for Xpert MTB/RIF testing in 2019.

Figure 3: Proportion of ART patients screening positive for TB symptoms, by newly/existing ART status



PEPFAR reporting cycles for semi-annual indicators: FY18Q2 = Oct 2017–Mar 2018, FY18Q4 = Apr 2018–Sept 2018, FY19Q2 = Oct 2018–Mar 2019, FY19Q4 = Apr 2019–Sept 2019

DISCUSSION

- Among PEPFAR-supported sites, the proportion of ART patients screened for TB symptoms is lower in new ART patients compared to existing ART patients
- Proportion of ART patients with a positive TB symptom screen has decreased among new and existing ART patients
- Gaps in appropriate TB diagnostic services persist; 1 in 5 PLHIV with TB symptoms did not receive diagnostic testing in 2019
- Continued vigilance in TB screening and increased uptake of GeneXpert-based TB testing is needed

Figure 1: Total new and existing ART patients, among countries retained for analysis

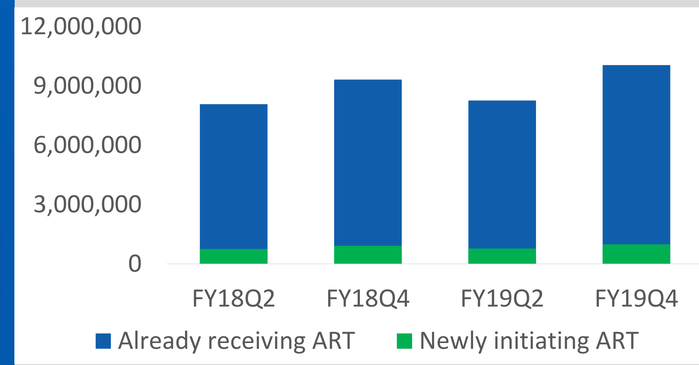


Figure 2: Proportion of ART patients screened for TB by new/existing ART status

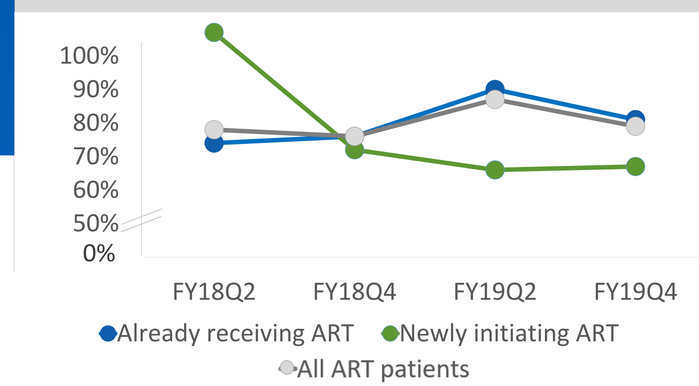
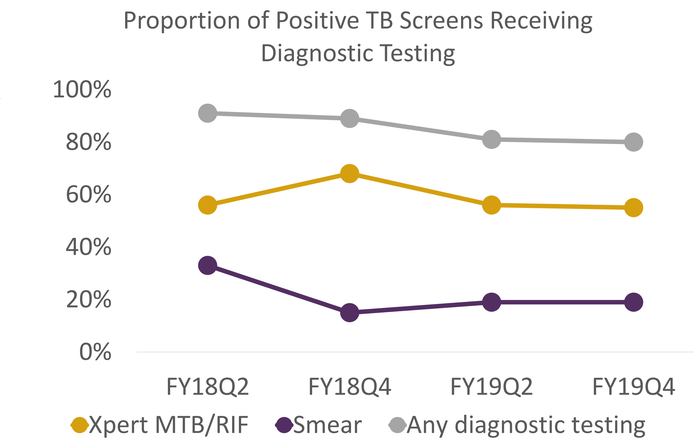


Figure 4: Proportion of positive TB screens receiving diagnostic testing, overall and by test type



CONTACT INFO

Meaghan Peterson
odt4@cdc.gov

www.cdc.gov | Contact CDC at: 1-800-CDC-INFO or www.cdc.gov/info The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.