

BACKGROUND

Cervical cancer is the leading cancer among women in Mozambique with an incidence of 42.8* cases per 100,000 women. Cervical cancer is six times** more frequent in women living with HIV (WLHIV). The prevalence of HIV among women of reproductive age is 15.4%*** in Mozambique. The World Health Organization 90-70-90 targets call for 90% of women to be immunized against human papillomavirus (HPV), 70% to be screened for cervical dysplasia, and 90% to be treated by 2030 to ensure countries are on the path toward cervical cancer elimination.

The Mozambique Ministry of Health began its partnership with the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), implementing partners and the MD Anderson Cancer Center in 2011 with the aim of improving access to high quality screening and treatment for precancerous cervical lesions among WLHIV. These efforts were scaled up in 2018 with a yearly investment of more than 5 million US dollars. Optimized dolutegravir based antiretroviral therapy (ART) regimens were introduced in 2018.

METHODS

We reviewed cervical cancer screening and treatment data from October 2018 to September 2021 from PEPFAR implementing partner-supported 628 health facilities in Mozambique's 11 provinces. The Electronic patient tracking system database was used to retrieve quarterly results on cervical cancer screening, screening yield and linkage to cervical cancer treatment (by loop electrosurgical excision procedure [LEEP], thermo ablation or cryotherapy) for HIV+ women on ART over the defined time period.

RESULTS

From October 2018 to September 2019, 72,707 of the 669,590 women on antiretroviral treatment in Mozambique were screened for cervical dysplasia (10.9%), with 10% (7,037) screening positive. Of these, 62% (4,384) were treated for precancerous lesions. During this period, screening varied by province from 4% in Manica to 17% in military health facilities supported by the U.S. Department of Defense (DOD), while treatment coverage ranged from 3% in Tete to 87% in Maputo City.

The following year, out of 773,775 women on ART, 218,534 were screened (28.2%), with 7.4% (16,135) screening positive. Sixty-eight percent of these (10,991) were treated. Screening ranged from 13% in Cabo Delgado to 42% in military health facilities. Treatment coverage was over 90% in Maputo City and Inhambane and was lowest in Zambezia and Sofala at 40%.

From October 2020 to September 2021 344,097 HIV+ women were screened of 900,090 on ART (38.2%). Of these, 24,146 screened positive (7%) and 20,271 were linked to treatment (84%). Screening ranged from 9% in Inhambane and Gaza to 36% in Niassa. Treatment coverage was over 90% in Maputo City and Province and Gaza and was lowest in Manica, Zambezia and Sofala at 40%.

A pilot of HPV testing in Maputo City and thermo ablation treatment were introduced in FY21.

Figure 1. PEPFAR Reported Results under the CXCA_SCRN Indicator, representing women on ART screened for cervical cancer.

Denominator: % of WLHIV on ART who are 15+ years and active on ART according to PEPFAR definition
Numerator: women screened for cervical cancer during the semi-annual reporting period.

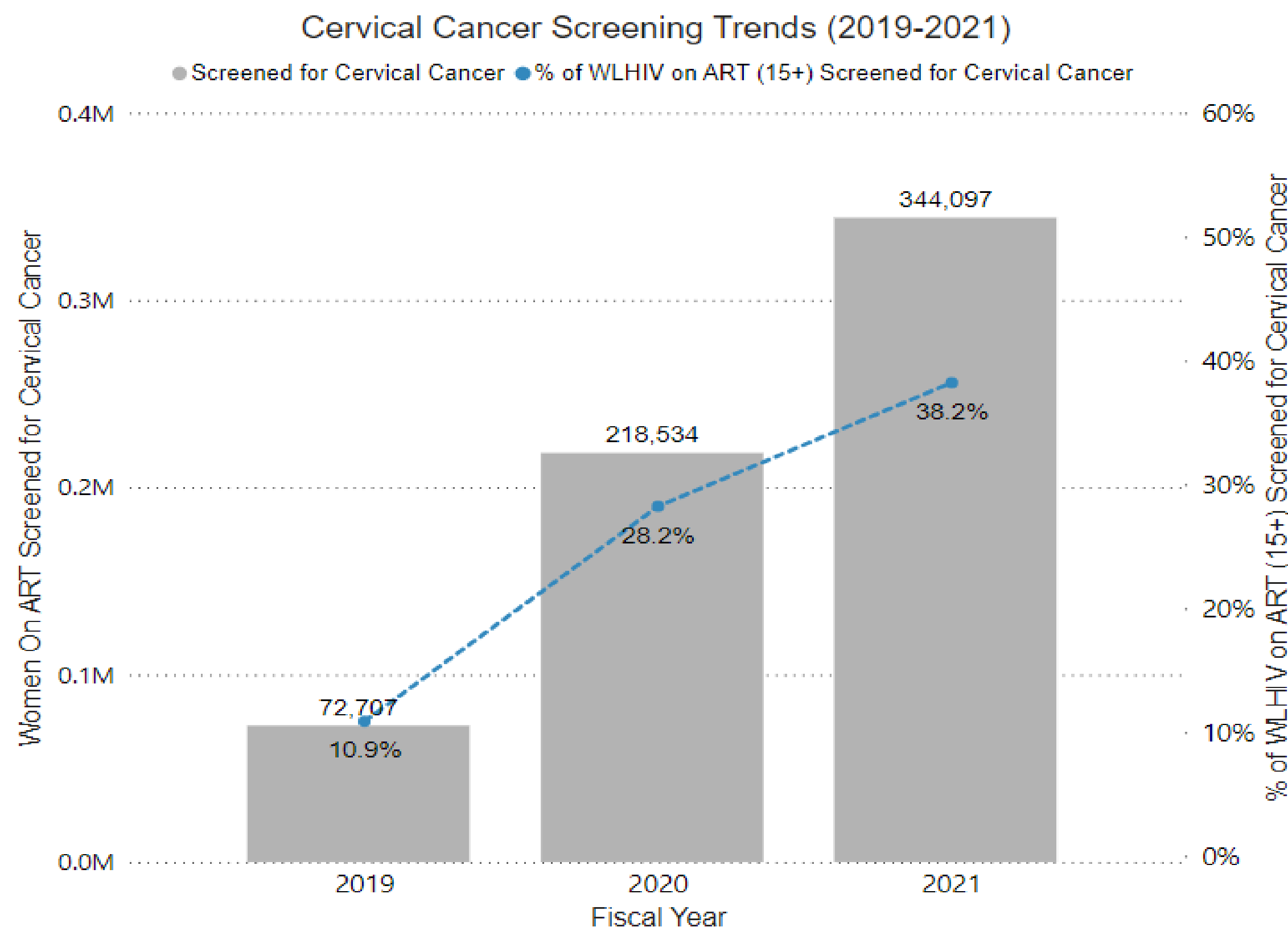


Figure 2. CXCA_SCRN_POS: PEPFAR reported results for number of women on ART screened for cervical cancer and confirmed to be positive (numerator)

Denominator: CXCA_SCRN, PEPFAR reported results for number of women on ART screened for cervical cancer

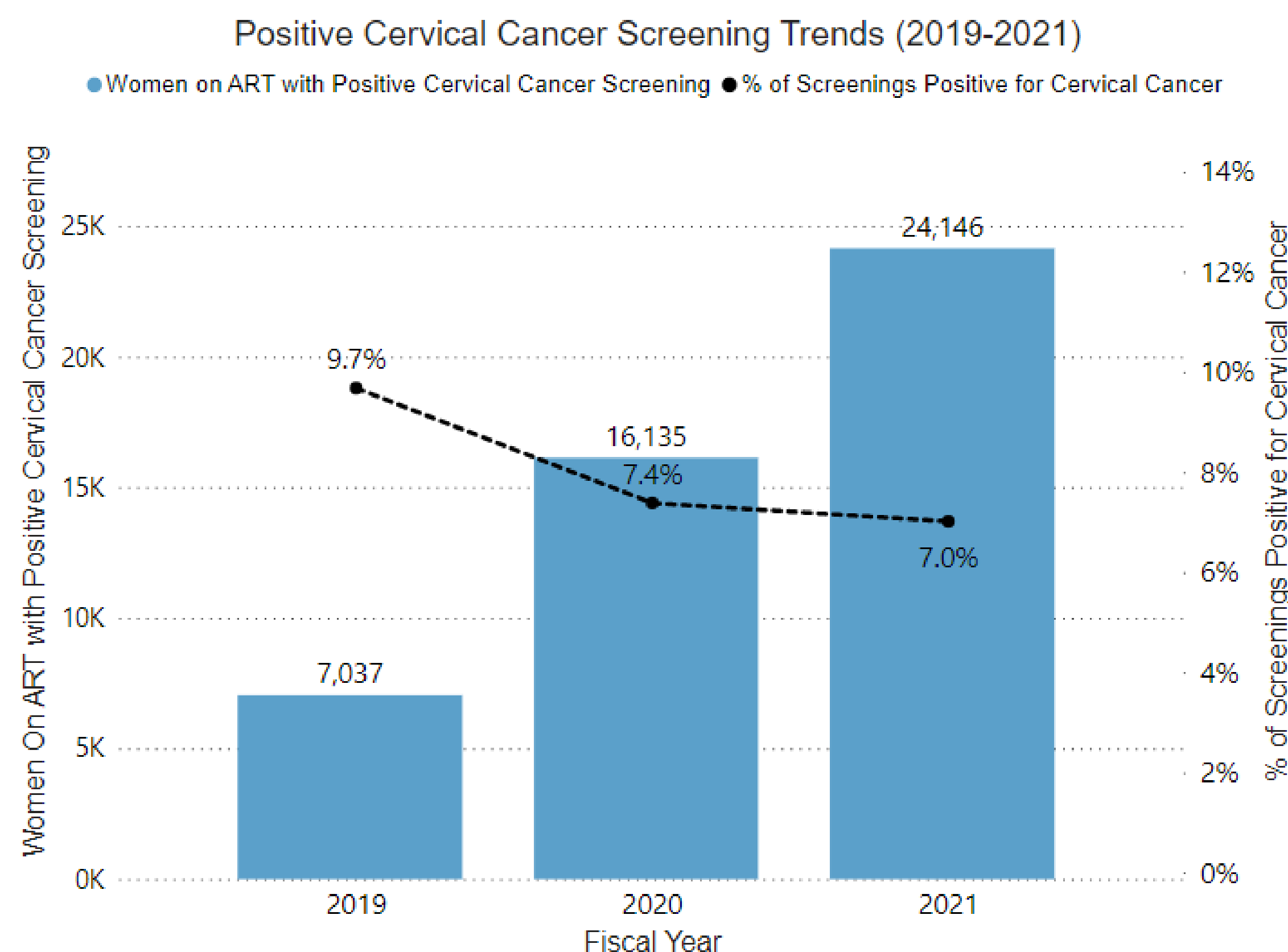
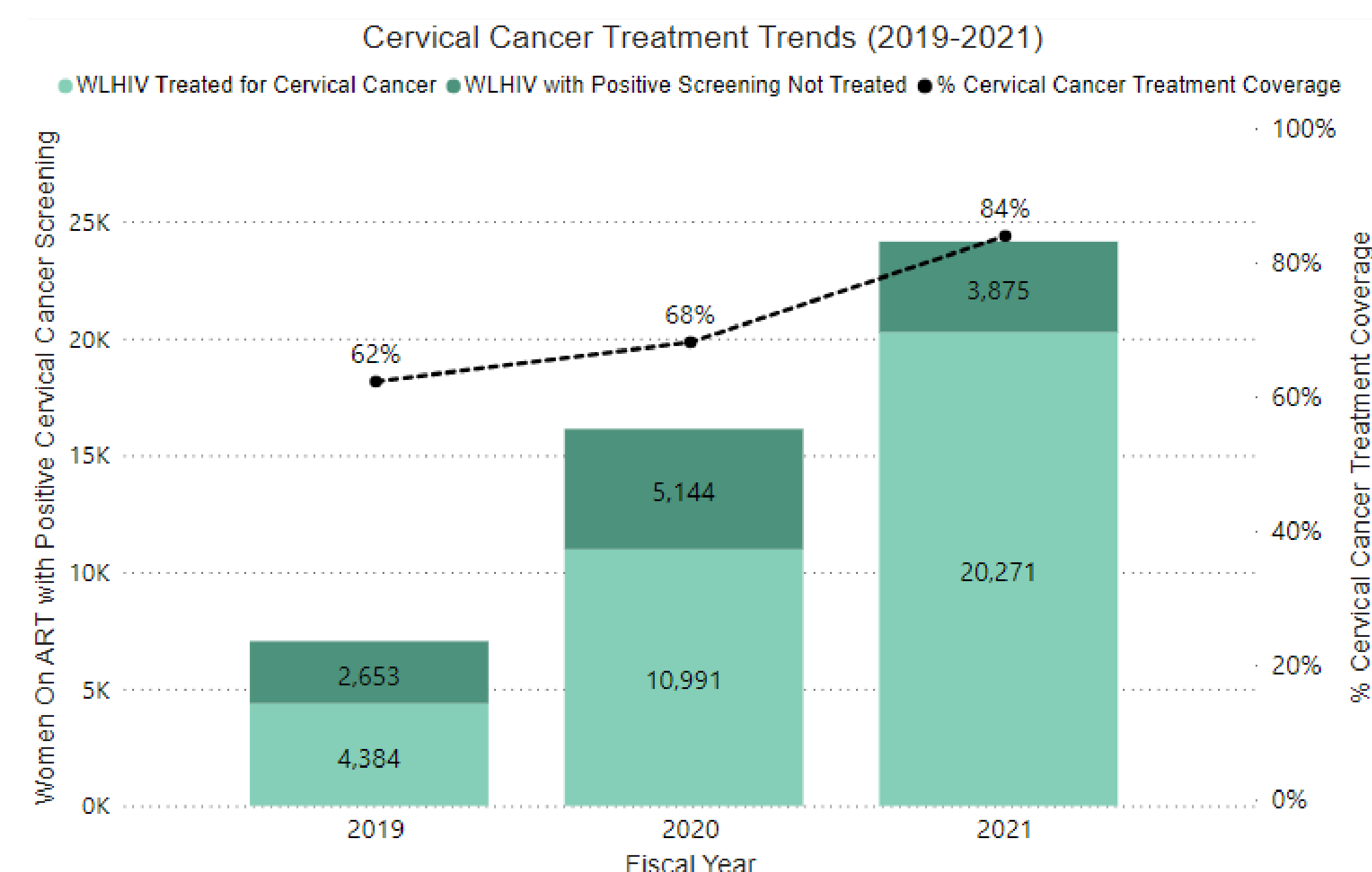


Figure 3. CXCA_TX: PEPFAR reported results for number of pregnant women on ART screened for cervical cancer and confirmed positive who received cervical cancer treatment using either LEEP, Thermo ablation or cryotherapy (numerator)

Denominator: CXCA_SCRN_POS, PEPFAR reported results for number of pregnant women on ART screened for cervical cancer and confirmed positive



REFERENCES

- *Lorenzoni C, Vilajeliu A, Carrilho C, Ismail MR, Castillo P, Augusto O, et al. Trends in cancer incidence in Maputo, Mozambique, 1991–2008. PLoS One. 2015;10(6).
- ** Stelzle D et al. Estimates of the global burden of cervical cancer associated with HIV. Lancet Global Health, 16 Nov 2020
- *** Survey of Indicators on Immunization, Malaria and HIV/AIDS, Mozambique, 2015

Figure 4. Ministry of Health/Peppar equipment allocation for treatment of cervical dysplasia in 2022

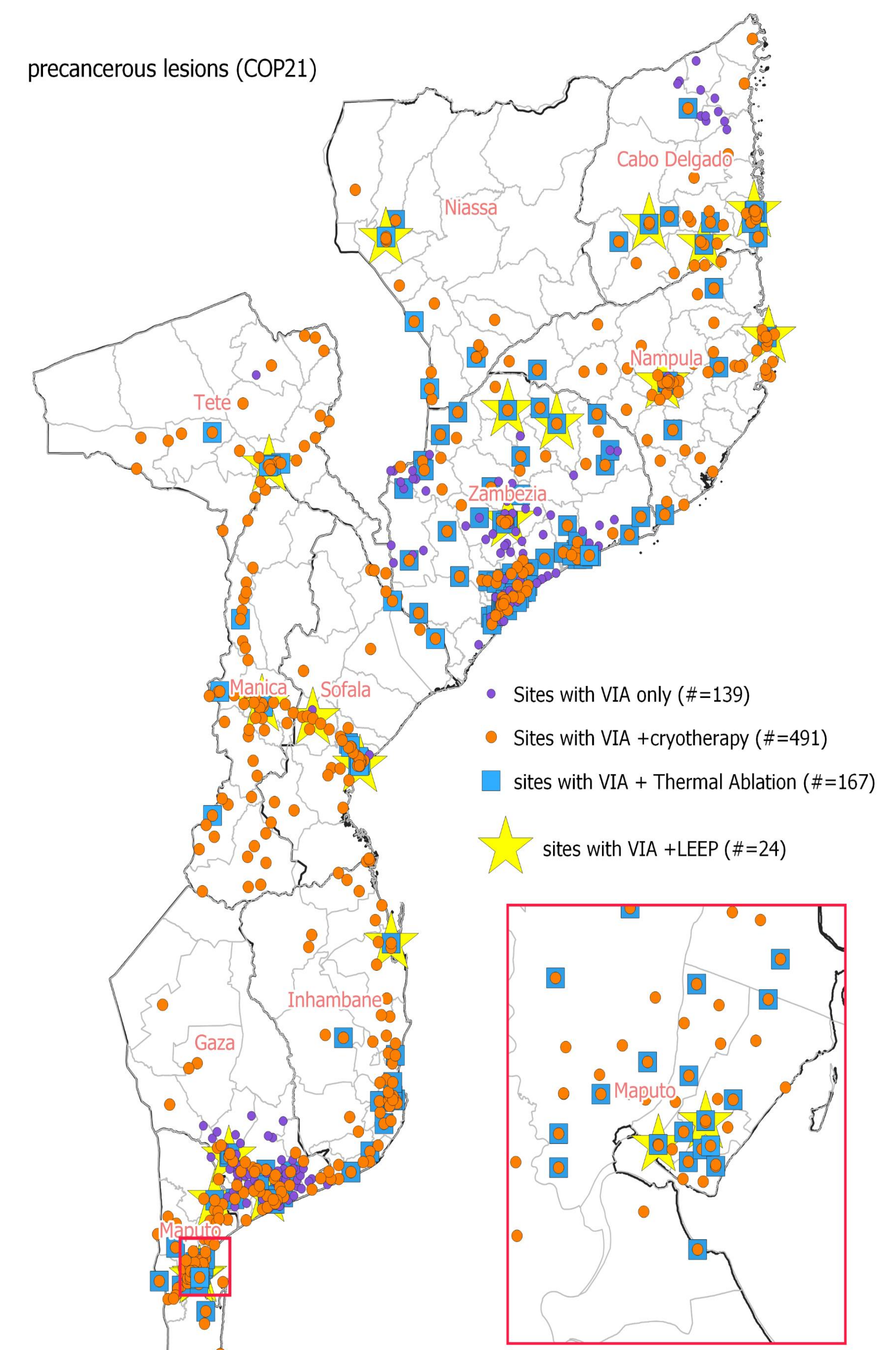


Figure 5 Thermo ablation training in Mozambique

Quarterly trainings for clinical providers with MD Anderson in-person and remote support



CONCLUSIONS

This review demonstrates a 4.7fold increase in the number of WLHIV who have been screened for cervical cancer over the past 3 years. In the same period Mozambique has introduced HPV vaccine for young girls and thermo ablation, piloted screening with HPV testing, and massively expanded treatment access; these achievements offer Mozambique the opportunity to get closer to eliminate cervical cancer.

Increases in screening and treatment coverage rates are a result of successful coordination between government and stakeholders, but further improvement is needed.

