

# ASSESSMENT OF HIV TESTING SERVICES AND ANTIRETROVIRAL THERAPY SERVICE DISRUPTIONS IN THE CONTEXT OF COVID-19: LESSONS LEARNED AND WAY FORWARD IN SUB-SAHARAN AFRICA

NOVEMBER 2021

## HIV TESTING SERVICES





## **TECHNICAL REPORT**

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**World Health  
Organization**

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# 1. BACKGROUND

The first human cases of COVID-19, the disease caused by SARS-CoV-2, were reported in December 2019 (1). On 30 January 2020 the World Health Organization (WHO) declared the SARS-CoV-2 outbreak a public health emergency of international concern (PHEIC), WHO's highest level of alarm (2). Since 2020, the COVID-19 pandemic has been responsible for the deaths of over 4.8 million people worldwide (3). In Africa, the first cases of COVID-19 were reported in February 2020. Since then, more than 6 million infections and close to 150 000 deaths have been reported (4).

The COVID-19 pandemic could have lasting effects on the HIV response in sub-Saharan Africa where there were approximately 20.6 million people with HIV, 870 000 new HIV infections and 460 000 HIV-related deaths in 2020 (4). In recent years, countries across sub-Saharan Africa have made considerable progress toward achieving the UNAIDS 95-95-95 targets.<sup>1</sup> Across eastern and southern Africa an estimated 89% of people with HIV know their status, 77% of people with HIV are on treatment and 70% of people with HIV have a suppressed viral load (4). However, there has been concern that the COVID-19 pandemic may have impeded critical efforts in Africa needed to achieve global goals to maintain declining HIV incidence.

The COVID-19 pandemic arrived in an evolving epidemiological context where some countries are experiencing a progressive decrease in HIV positivity in their testing programme as they are moving closer to the first 95 target (5). In recent pre-pandemic years, many sub-Saharan African countries had been adapting to changing epidemiology by transitioning from a wide-scale HIV testing services to more targeted testing. As a result, between 2018 and 2020, there was a 35% reduction in HIV testing targets in the President's Emergency Plan for AIDS Relief (PEPFAR) supported programmes globally (6). Between 2019 and 2020, the Global Fund reported HIV testing volumes decreasing by 22% (from 134M to 104M tests performed each year) (7).

A similar trend was reported during this period by the PEPFAR which indicated there was a 17% decrease in HIV testing volumes in countries receiving support (from 74M to 61M tests performed each year) (6). These reductions contribute to a large proportion of decreases in HIV testing across low- and middle-income countries.

Programmes focused on reaching key populations were also disrupted last year. According to a retrospective study of programmatic implementation, between 2019 and 2020, across 44 countries from four continents, HIV testing among key populations decreased by 10% among people who inject drugs and by 59% among sex workers (8).

Distinguishing changes in HIV testing services due to the COVID-19 pandemic from those resulting from evolving HIV testing strategies is crucial for adapting services and helping countries define their strategic mix of testing options moving forward. There is a need to focus, prioritize and plan for strategic efforts to prevent going further off the track toward achieving global targets and goals.

To support these efforts, WHO in partnership with ministries of health conducted an in-depth analysis of HIV testing services and antiretroviral therapy (ART) initiation prior to and during reported COVID-19 disruptions. Additional publicly available Global Fund and PEPFAR data was also reviewed and analysed. This analysis, and coordination with ministries of health, identified key service delivery adaptations utilized during COVID-19-related disruptions and formed the basis of this strategic guide.

This document focuses on current country needs, as well as plans for prioritization and potential surge support needs in the event of future disruptions. Although the data and implications are specific to sub-Saharan Africa, key principles and lessons can be applied elsewhere. For this report, Malawi, South Africa and Zambia serve as illustrative examples.

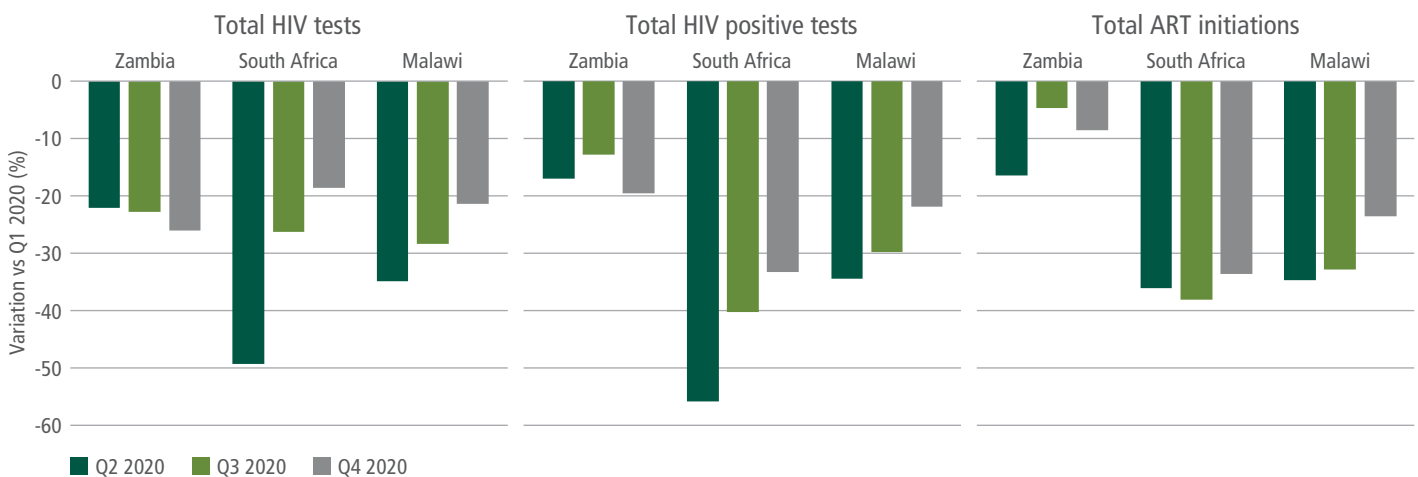
1. By 2025, 95% of people living with HIV know their status, 95% of those who know their status are on treatment, and 95% of those on treatment are virally suppressed.

## 2. COVID-19 DISRUPTIONS TO HIV TESTING SERVICES: LESSONS LEARNED

Ministries of health in Zambia, South Africa and Malawi provided routine, aggregated data on HIV testing, ART initiation and antenatal care (ANC) for 2020. Between April and June 2020 HIV testing volumes decreased by 22.3%, 49.9% and 34.8% in Zambia, South Africa and Malawi, respectively, compared to reporting between January and March 2020 (Fig. 1). The total number of HIV-positive test results decreased by 17.0%, 56.1% and 33.0% and the total number of people starting ART decreased by 16.6%, 35.3% and 36.8% in Zambia, South Africa and Malawi, respectively. A partial recovery in HIV testing volumes and diagnosis of HIV-positive cases took place in subsequent quarters and has continued into 2021.

While the data show decreased HIV testing volumes and HIV positivity in all three countries, we see more in detail how COVID-19 appears to have impacted HIV testing, identification of positive cases, and ART initiations in South Africa when compared with Zambia and Malawi. Notably, declines in HIV testing volumes were occurring pre-COVID-19 in Zambia and Malawi as part of a more targeted national HIV testing strategy.

**Fig. 1. Variation in the number of HIV tests, HIV-positive tests, and ART initiations per quarter in Zambia, South Africa and Malawi, 2020**



The chart compares the variation in the volume of HIV testing, HIV-positive tests and ART initiations by comparing the first quarter 2020 (January to March) to

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