

THE IMPACT OF COVID-19 ON HIV SERVICE DELIVERY

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IMPACT OF COVID-19 ON HIV

Short term:

- Health impact of covid-19 on PLHIV, those suppressed and unsuppressed.
- Health seeking behavior altered by perceptions of risk and none pharmaceutical covid-19 interventions
- Health service delivery impacted by disruption to facilities, health care workers, and commodities, including HIV tests and clinical diagnostics, ARVs, prevention commodities (condoms & PrEP).

Medium term:

- Social and economic disruption cause by the covid-19 pandemic change risks of HIV transmission and acquisition?
- PLHIV diagnosed but not linked or lost from treatment need to be re-engaged.
- New patterns of ARV resistance caused by treatment disruption need management.
- Potential for tools developed in covid-19 response to be used in HIV interventions (e.g. contact tracing apps, remote testing models, CHW support, health communication approaches)

Long term

- Micro and macro economic impact of covid-19 pandemic on the case for international and domestic resources being used for HIV.
 - Systems need to be strengthened to prepare for pandemics interfacing with HIV systems.
 - Covid-19 pandemic driven changes to the institutions addressing the HIV pandemic.
 - Lessons learned for communicating about health and risks during the covid-19 pandemic.
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The potential direct impact of Covid-19 on people living with HIV (PLHIV)

Davies MA et al, HIV and risk of Covid-19 death: a population cohort study from the Western Cape Province, South Africa, MedRxiv preprint

Data from routine clinical records shows an increased risk of severe symptoms and death amongst those acquiring Covid-19 who are HIV infected. For example amongst the approximately 3.5 million public sector patients seen in the past 3 years the adjusted hazard rate for mortality for PLHIV was 2.17 (95% C.I. 1.7-2.7).

This increased risk is smaller than the risk associated with age and some other comorbidities, But was driven by those < 50 years of age.

It was not influence by HIV treatment

An important question is whether this increased hazard will be maintained in locations with a less well-resourced health system, with presumably higher overall mortality.

Similar results have been found from hospital records in the UK: Geretti AM et al Outcomes of COVID-19 related hospitalisation among people with HIV in the ISARIC 2 WHO Clinical Characterisation Protocol UK Protocol: prospective observational study. MedRxiv Preprint

Jewel et al Potential effects of disruption to HIV programmes in sub-Saharan Africa caused by COVID-19: results from multiple mathematical models. Lancet HIV.

In response to the early spread of covid-19 and restrictions imposed to reduce spread 5 modeling teams explored the potential impact of HIV service disruption on HIV incidence and mortality.

They predicted that a 6 month interruption in treatment for 50% of the population to generate 230,000 to 420,000 AIDS deaths.

Treatment interruptions and reduced condom availability had the greatest impact on HIV incidence.

In the short term these are significant disruption, portraying extreme outcomes with the goal of preventing those outcomes being realized.

We can now start tracking what the service disruptions have actually been. Countries have been reporting trends to UNAIDS.

HIV Service Disruptions in 2020: UNAIDS HIV service tracking database August 2020

The data needs to be treated with caution given uncertainty in its quality, but on HIV treatment it is reassuring, with minimal declines:

Among the 30 countries with trend data, only 5 countries reported monthly declines in the numbers of people on treatment between January and June 2020.

These five countries included Dominican Republic and Gambia (sustained as of April), Lesotho, Zimbabwe (relative 18% drop in June compared to January), and Sierra Leone.

Supplies of ARVs and other commodities is a worry, and we are seeing some local disruption, But overall national stocks have not been too badly effected.

PEPFAR through the USAID Global Health Supply Chain –Procurement and Supply Management project keeps track and delays for orders are in the region of a month and the number of delayed orders has been declining over the last few months.

HIV Service Disruptions in 2020: Source UNAIDS HIV service tracking database August 2020

HIV diagnosis has seen significant reductions across many African countries since the beginning of the covid-19 pandemic with declines in treatment initiation.

HIV prevention services, particularly voluntary medical male circumcision have ceased in some countries

This requires the development of interventions with protective equipment and potentially using new tools such as HIV self-tests and procedures to reengage people with HIV services.

Differentiated service delivery, with simplified drug pick up, multi-month prescriptions, and community based services have been useful in adapting HIV treatment in response to covid-19

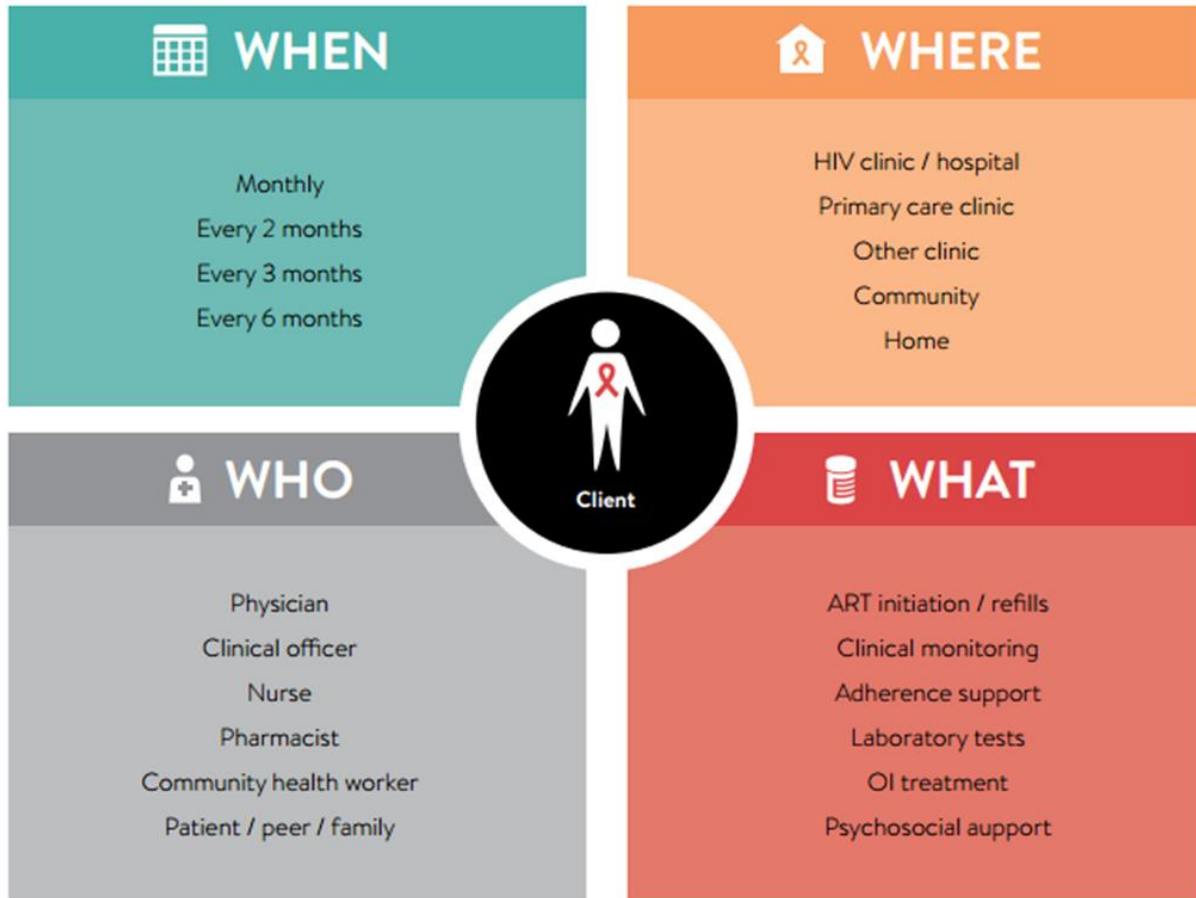
Past work exploring why PLHIV are lost from treatment will need to be redone to understand the new context.

HOW DO YOU GET PEOPLE TO START ART AND STAY RETAINED IN CARE?

Key interventions to improve retention:

- Remove barriers to **same day initiation**
- Use **DTG-based ART** combinations which are better tolerated and cheaper
- **Simplify ART delivery** through longer refills and pick up outside of typical facility services
- **Reserve intense clinical services** for people with unsuppressed VL, advanced disease, or psychosocial challenges
- Make it easier for people who interrupt care to return through explicit **“welcome back” services**

Client-centered Differentiated Care



Key Interventions & System Enablers of Differentiated Care:

- Community Based Delivery / Peer Support Networks
- Robust Supply Chain Management
- Viral Load Monitoring
- Supportive Regulatory Frameworks (multi-month ART prescribing)
- Data Systems for Patient Tracking and Program Monitoring and Evaluation

PEPFAR, the Global Fund, WHO HIV, Hepatitis, and STI department, and UNAIDS have done a great job responding to the needs for changes in HIV guidance and there are many resources online. For example:

Source CHAI: <https://www.newhivdrugs.org/covid-19>



PEPFAR, Global Fund, and WHO Guidance

- [Q&A on HIV and viral hepatitis and COVID-19 \(WHO\)](#)
- [APWG COVID-19 Newsflash](#)
- [PEPFAR Technical Guidance in the Context of COVID-19 Pandemic](#)
- [Global Fund COVID-19 Updates](#)
- [Global Fund Health Product Supply Updates](#)
- [Global Fund COVID-19 Information note: Considerations for Global Fund support of HIV](#)
- [Actions to Take to Ensure Supplies are Available \(USAID-GHSCP\)](#)
- [Disruption in HIV, Hepatitis and STI services due to COVID-19 \(WHO\)](#)

CONCLUSIONS

- Directly and indirectly the Covid-19 pandemic could dramatically impact the HIV pandemic.
- The implications of an observed increase in Covid-19 mortality in <50-year olds will depend on whether the hazard rate holds in locations with poor access to covid-19 care with a higher overall mortality.
- Immediate worst-case scenarios result from treatment interruption. However, so far supplies and adaptation of services seem to have avoided these worst cases.
- Testing and treatment initiation, along with prevention access, seem worst affected and will translate into increased incidence if impact is not reversed
- Differentiated Service Delivery, with multi-month prescriptions and community distribution points provided a useful existing framework to help maintain treatment. HIV self tests also have potential to reduce patient provider contacts but have had limited use to date.
- We will need to plan to re-engage PLHIV.
- Long term impact on the HIV funding environment is a major concern.