

Operational Considerations for Maintaining Essential Services and Providing Care and Treatment for those Living with HIV in Low-Resource non-US Settings During the COVID-19 Pandemic

Background

As of the end of June 2019, there were an estimated 37.9 million people living with HIV (PLHIV), of whom 24.5 million were accessing antiretroviral therapy (ART) (1). Maintenance of ART services – in addition to continued case identification and prompt enrollment of newly diagnosed PLHIV on lifelong treatment – is critical to protect massive global investments and their resultant progress towards HIV epidemic control. Notably, in May 2020, a modelling group convened by the World Health Organization (WHO) and Joint United Nations Programme on HIV/AIDS (UNAIDS) estimated that “if efforts are not made to mitigate and overcome interruptions in health services and supplies during the COVID-19 pandemic, a 6 month disruption of ART could lead to more than 500,000 extra deaths from AIDS-related illnesses, including from tuberculosis (TB) in sub-Saharan Africa in 2020-21” (2).

Purpose

This document offers operational considerations for maintaining essential HIV services in low-resource settings in the context of COVID-19.

Implementation Considerations

Currently available data, though limited, do not suggest that PLHIV are at risk for more severe COVID-19 disease than the general population (3), and thus PLHIV and healthcare facilities that serve them should follow standard precautions for infection prevention and control ([IPC](#)) recommended for all populations (4). However, advanced HIV disease (e.g., CD4 count <200 cells/mm³) is a risk factor for complications from other respiratory infections, and may increase risk of severe illness from COVID-19. In addition, some PLHIV may have additional comorbidities that put them at risk for severe illness from COVID-19, such as [diabetes and hypertension](#). Thus, US and WHO guidelines recommend treating PLHIV with advanced or poorly controlled HIV (e.g., high viral load [VL] >1000 copies/mL) as if they are at increased risk until more information is available (3, 5-7).

For PLHIV who have suspected, probable, or confirmed COVID-19, care and treatment for this disease should follow the same protocols as for the general population (7), and should be managed in areas dedicated to COVID-19 care. Their ART regimens should be continued even if they are symptomatic or hospitalized. Some antiretroviral regimens (e.g., lopinavir/ritonavir, boosted darunavir, and tenofovir disoproxil fumarate/emtricitabine) are being evaluated in clinical trials and/or prescribed for off-label use for COVID-19 treatment or prevention; however, PLHIV should not change their current ART regimen in an effort to treat or prevent COVID-19 (3). Notably, the US National Institutes of Health specifically recommends against use of lopinavir/ritonavir or other HIV protease inhibitors for the treatment of COVID-19 except in the context of a clinical trial (8).

The US President’s Emergency Plan for AIDS Relief (PEPFAR) regularly updates and provides detailed, publicly available [technical guidance](#) for its HIV programs in the context of COVID-19. This technical guidance supports prioritizing continuity of care for PLHIV, leveraging existing health systems and infrastructure, reducing exposure of staff and clients to healthcare settings that may be overburdened and/or sources for potential exposure to COVID-19, and providing flexibility for programs in how to optimally serve clients in areas affected by COVID-19 (9). Several of these considerations are outlined below.

HIV viral suppression for all known PLHIV is critically important, and thus many considerations for HIV service delivery in the context of COVID-19 center on uninterrupted ART. Multi-month dispensing (MMD, 3-6 months preferred) as well as decentralized delivery of ART are cornerstones of this strategy, and recommended by PEPFAR even for new ART initiators, pregnant and breastfeeding women, infants, and children (9). Decentralized



delivery of ART can occur through existing or newly adopted differentiated HIV service delivery models, including community or private pharmacies, home delivery (via HIV-positive peer networks or private contractors), automated lockers, or community pickup points (e.g., post offices, churches). All options can also be leveraged for delivery of medications for pre-exposure prophylaxis (PrEP), prevention of opportunistic infections (such as TB preventive therapy or cotrimoxazole), and other chronic disease management, and/or supplies like HIV self-testing kits and condoms, with appropriate supply chain adaptations to ensure uninterrupted availability.

In the context of COVID-19, HIV facility visits should be limited to those deemed medically essential, to reduce the risk and burden to recipients of care and health care providers. Some facilities may consider providing services for PLHIV and other chronic illnesses in the community to reduce risk of COVID-19 exposure and infection in health facilities, either using community health workers to deliver care or in makeshift clinics in the community (10). For patients who require facility-based services, all efforts should be made to maintain [physical distancing](#) between patients (at least 2 meters, 6 feet), encourage handwashing by patients and staff, encourage all patients, and visitors to use [cloth face](#) coverings, streamline clinic patient flow, stagger clinic appointments, and conduct HIV care and treatment services in dedicated spaces that are physically separated from areas where COVID-19 patients are being managed. PLHIV with COVID-19 should be managed in the areas dedicated to COVID-19 care. Staff interacting with patients should use medical masks for routine care; where [medical masks are not available](#), a face shield or cloth face covering plus face shield should be used. Where possible, health care providers and patients should use telehealth options such as phone calls or other virtual options for routine or non-urgent consultations (including HIV adherence counselling), with careful consideration for patient privacy and confidentiality. Similar options can also be considered in place of patient support services typically offered in the community, such as peer support groups and home visits.

In addition to ART delivery, adapting other HIV services may be considered in the context of COVID-19 (9). For HIV prevention, delivery of condoms, PrEP, and post-exposure prophylaxis [PEP] may be particularly important during periods of ongoing confinement, in addition to preventive and psychosocial services for gender-based violence and child protection. Although HIV testing may be affected by reductions in facility utilization and community testing activities, it should be prioritized for patients with clinical suspicion of or known exposure to HIV, and in healthcare settings providing antenatal care, TB, sexually transmitted infection or malnutrition services. HIV self-tests may also be an option where traditional testing services are temporarily unavailable to screen people for in-person testing. Active patient tracking and tracing to ensure linkage to care once diagnosed, and for patients late to appointments or medication pick-ups or lost to follow up, should rely primarily on phone calls (requiring up to date contact information for all clients) before resorting to in-person tracking in communities. All persons involved in tracking patients in the community should be provided with proper PPE and follow IPC procedures (4).

Routine viral load (VL) monitoring may be affected by staffing or facility limitations, and/or concurrent use of HIV diagnostic instruments for SARS-CoV-2 testing. If prioritization is required, PEPFAR guidance suggests VL and early infant diagnosis services first be provided to children, pregnant and breastfeeding women, and adults with recent documented non-suppression (9); consideration should also be given to those with signs of treatment failure, and patients requiring initial VL assessment after ART initiation. Finally, opportunistic infection screening and prophylaxis (including for TB) should be continued with as little reliance on in-person facility visits as possible.

Notably, certain vulnerable populations may require focused attention to ensure uninterrupted service delivery. For example, children, adolescents, and pregnant and breastfeeding women should be included in differentiated HIV service delivery models that they may previously have been excluded from, such as multi-month dispensing (MMD). The same applies for patients with advanced HIV disease and/or high VLs who may require more frequent clinical evaluation. For some, this may be conducted virtually or outside a facility-based setting.

Consider prioritizing efforts to continue critical services for key populations (who may be at increased risk for both HIV and COVID-19 infection), such as treatment for substance use disorder, including medications for opioid use disorder, access to clean/sterile injection supplies such as needles and syringes. Programs may also wish to be vigilant for increasing mitigation efforts to address food and economic insecurity among PLHIV in the context of COVID-19. Attention to stigma reduction and human rights may be particularly important during the COVID-19 pandemic, including through meaningful involvement of PLHIV and community-based and civil-society organizations to adapt HIV programs, services, and community literacy messaging and campaigns with locally appropriate contexts.

Finally, the safety and support of HIV service providers, including facility and laboratory staff, community workers, peer navigators, etc., should be considered to ensure continuity and sustainability of services. This may require provision of IPC training (preferably virtual), adequate [personal protective equipment](#) (4), and [safe options/passage for transportation](#) to and from work (11). Some staff may be asked to task-shift or fill in for others who are sick or at high-risk for severe COVID-19 disease (as this latter group should be discretely transitioned away from frontline duties). Throughout all of this, availability of psychosocial support for service providers should be considered to manage stress and reduce burnout.

References

1. Joint United Nations Programme on HIV/AIDS (UNAIDS). Global HIV and AIDS Statistics – 2019 Fact Sheet. Available at: <https://www.unaids.org/en/resources/fact-sheet>. Accessed on May 22, 2020.
2. World Health Organization. The Cost of Inaction: COVID-19-Related Service Disruptions Could Cause Hundreds of Thousands of Extra Deaths from HIV. Available at: <https://www.who.int/news-room/detail/11-05-2020-the-cost-of-inaction-covid-19-related-service-disruptions-could-cause-hundreds-of-thousands-of-extra-deaths-from-hiv>. Accessed on May 27, 2020.
3. AIDSInfo (U.S. National Institutes of Health). Interim Guidance for COVID-19 and Persons with HIV. Available at: <https://aidsinfo.nih.gov/guidelines/html/8/covid-19-and-persons-with-hiv--interim-guidance-/554/interim-guidance-for-covid-19-and-persons-with-hiv>. Accessed on May 22, 2020.
4. Centers for Disease Control and Prevention. Operational Considerations for Infection Prevention and Control in Outpatient Facilities: non-U.S. Healthcare Settings. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/non-us-settings/ipc-healthcare-facilities-non-us.html>
5. World Health Organization. Q&A: HIV, Antiretrovirals and COVID-19. Available at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/q-a-on-covid-19-hiv-and-antiretrovirals>. Accessed on May 22, 2020.
6. U.S. Centers for Disease Control and Prevention. Coronavirus Disease 2019: People with HIV. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/hiv.html>. Accessed on May 22, 2020.
7. Infectious Disease Society of America. COVID-19: Special Considerations for People Living with HIV. Available at: <https://www.idsociety.org/globalassets/covid-19-special-considerations>. Accessed on May 22, 2020.
8. U.S. National Institutes of Health. COVID-19 Treatment Guidelines. Available at: <https://covid19treatmentguidelines.nih.gov/>. Accessed on May 27, 2020.
9. U.S. President’s Emergency Plan for AIDS Relief (PEPFAR). PEPFAR’s HIV Response in the Context of Coronavirus Disease 2019 (COVID-19). Available at: <https://www.state.gov/pepfar/coronavirus/>. Accessed May 26, 2020.
10. WHO. Maintaining essential health services: operational guidance for the COVID-19 context, 1 June 2020. Geneva: World Health Organization. (<https://www.who.int/publications-detail/10665-332240>, accessed June 4, 2020).
11. U.S. Centers for Disease Control and Prevention. Protect Yourself When Using Transportation. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/using-transportation.html>