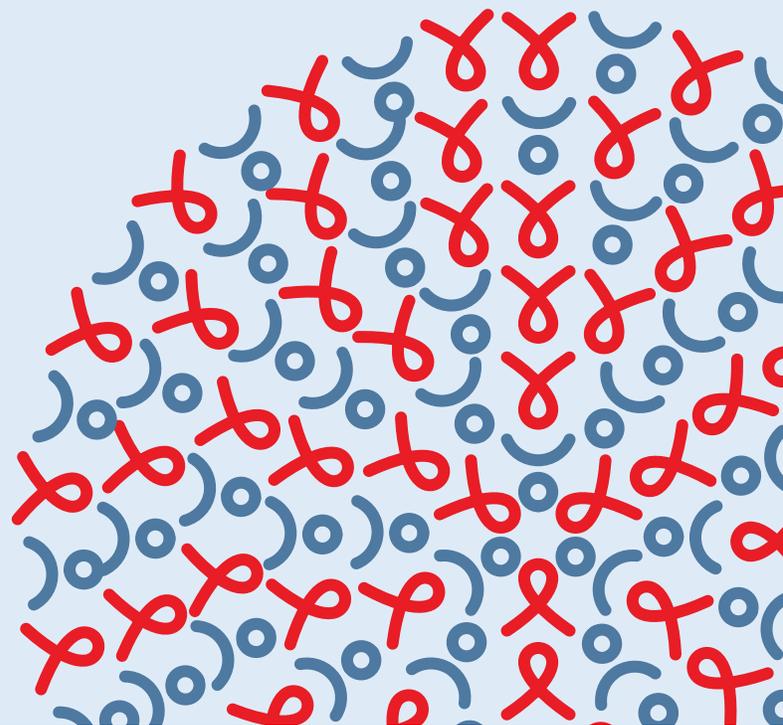


MEETING TARGETS AND MAINTAINING  
EPIDEMIC CONTROL (EPIC) PROJECT

COOPERATIVE AGREEMENT NO.  
7200AA19CA00002

# Ensuring uninterrupted essential HIV treatment services to clients during the COVID-19 pandemic

MAY 2020



## Acknowledgments

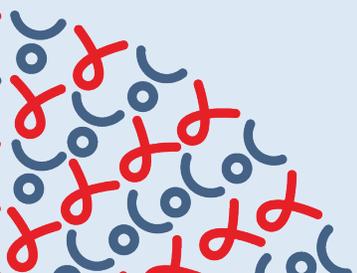
The guide was developed by Edward Oladele (FHI 360), Caterina Casalini (EpiC/FHI 360), and Moses Bateganya (EpiC/FHI 360). The authors would like to thank Christian Pitter (FHI 360), Rose Wilcher (FHI 360), and Stevie Daniels (FHI 360) for providing valuable review and feedback.

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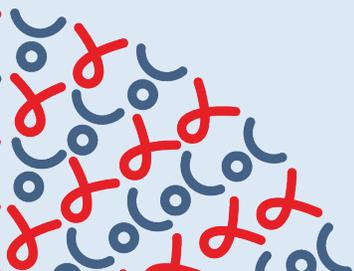
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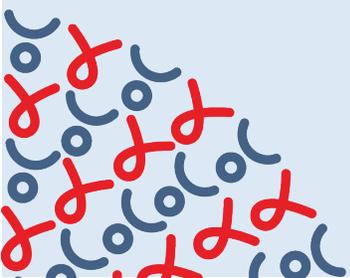
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## Acronyms

<b>ART</b>	Antiretroviral therapy
<b>ARVs</b>	Antiretroviral drugs
<b>CARGs</b>	Community ART refill groups
<b>COVID-19</b>	Coronavirus disease of 2019
<b>CPT</b>	Cotrimoxazole preventive therapy
<b>DD</b>	Decentralized distribution
<b>EMR</b>	Electronic medical record
<b>HIV</b>	Human immunodeficiency virus
<b>IEC</b>	Information, education, and communication
<b>M&amp;E</b>	Monitoring and evaluation
<b>MMD</b>	Multimonth dispensing
<b>PLHIV</b>	People living with HIV
<b>PrEP</b>	Pre-exposure prophylaxis
<b>TPT</b>	Tuberculosis preventive therapy
<b>TQLA©</b>	Total quality, leadership, and accountability
<b>VL</b>	Viral load
<b>WHO</b>	World Health Organization



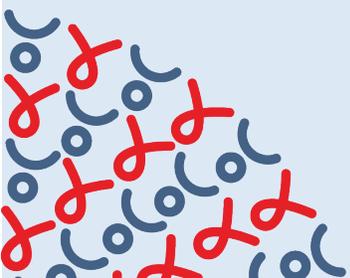
## Executive summary

The coronavirus disease of 2019 (COVID-19) pandemic has caused and is still causing severe disruptions to health systems, economic activities, and movement of people throughout the world. In many countries, gatherings are prohibited, and people are required to stay at home. These restrictions may hinder individuals from going to antiretroviral therapy (ART) clinics, potentially disrupting access to treatment for people living with HIV (PLHIV). Although much is still being learned about the disease's dynamics, person-to-person spread is thought largely to occur via droplets produced by a coughing or sneezing person within close quarters (less than 2 meters, about 6 feet, distance). Severe illness and death are more common among people who are older or have underlying comorbidities such as cardiovascular and chronic respiratory illnesses, diabetes, or cancer. There is no evidence yet of increased risk or severity of illness for individuals who are HIV positive, although, as with other respiratory illnesses, people with severe immunosuppression (CD4 <200) may have higher risk.

Given the foregoing, project teams providing support for HIV treatment services must prioritize certain areas of focus during this pandemic. These include ensuring continued care for PLHIV, reducing provider and client exposure to situations that increase the potential for spreading COVID-19, and flexibility and innovation in areas affected by COVID-19. The key technical priorities to ensure uninterrupted essential HIV treatment services are:

- Enhanced patient communication, client experience, and teleconsultations
- Advancing decentralized drug distribution
- Leveraging multimonth dispensing (MMD) for ART, tuberculosis preventive therapy (TPT), and cotrimoxazole preventive therapy (CPT)
- Ensuring retention of patients in care

The purpose of this guide is to help ensure PLHIV are able to receive treatment services without breaks and is intended for use by project managers and teams in planning and implementing these strategies. Models for implementation, considerations for planning, and steps for scaling up interventions are presented for each of the technical priorities listed above. The appendices include tools and a list of curated resources.



# Introduction

In December 2019, a disease caused by a new virus—severe respiratory syndrome coronavirus 2 (SARS-CoV-2)—now named COVID-19 was first reported to the World Health Organization (WHO) in Wuhan, Hubei Province, China. Since then, the outbreak has reached pandemic status across the globe with more than 2 million confirmed cases and more than 139,000 deaths. The associated crude mortality rate is 4.6 percent.<sup>1</sup> Knowledge of transmission dynamics, treatment, and control is limited but rapidly evolving. One of the main control strategies is physical distancing which requires individuals to stay at home and limit travel, and, in many instances, whole city lockdown. These measures have caused severe disruptions to health services, economies, livelihoods, and daily routines. The rapid growth in COVID-19 cases has put a strain on even the most robust health systems with health workers pulled away from other services to strengthen COVID-19 readiness and response. As more cases begin to be reported in countries with fragile or limited health systems, further strain is expected.

Although much is still being learned about the disease's dynamics, person-to-person spread is thought largely to be via droplets produced by a coughing or sneezing person within close quarters (less than 2 meters, about six feet, distance). The disease may run a mild, moderate, or severe course. Severe illness and death are more common among older patients and persons with underlying comorbidities such as cardiovascular and chronic respiratory illnesses, diabetes, or cancer.<sup>2</sup> There is no evidence yet of increased risk or severity of illness for individuals who are HIV positive, although, as with other respiratory illnesses, people with severe immunosuppression (CD4 <200) may stand a higher risk. With increasing cases being reported in countries with a high prevalence of HIV, new data may soon emerge.

Given the potential health system disruptions, ensuring that PLHIV continue to receive essential HIV treatment services is important to prevent a reversal in the gains toward HIV epidemic control. And, as systems for HIV services are leveraged for COVID-19 control, efforts should be made to prevent spread among PHLIV and health workers who provide services and to implement local adaptations for service delivery in areas most affected by COVID-19. This guidance presents areas for immediate focus by managers and teams of HIV projects.

## What is most important for clinical teams to implement at this time?

To protect the gains in the HIV response, clinical teams should ensure continuous ART provision to current recipients to maintain virologic suppression. The priority areas for focus:

- Ensuring continued care for PLHIV
- Reducing staff and client exposure to facilities that are overburdened by and/or present potential exposure to COVID-19
- Flexibility and innovation for programs serving HIV clients in areas affected by COVID-19

The key technical priorities to ensure uninterrupted essential HIV treatment services in line with the principles described above are:

- Enhanced patient communication, client experience, and teleconsultations
- Advancing decentralized drug distribution
- Leveraging MMD for ART, tuberculosis preventive therapy (TPT), and cotrimoxazole preventive therapy (CPT).
- Ensuring retention of patients in care

In all instances of continued service delivery, strict adherence to appropriate physical distancing protocols must be observed (see Appendix 4 for infection prevention and control guidance for health care settings).

## Enhanced patient communication, client experience, and teleconsultations

### Rationale

Traditional engagement between HIV service providers and clients has relied on face-to-face interaction during clinic review visits, laboratory appointments, and drug refill visits. In affected countries, physical visits may not only be prohibited, but also discouraged in order to minimize transmission of the coronavirus. The direct access that programs have with clients should be leveraged to complement public health campaigns for improving awareness of the virus and measures to prevent transmission. It is thus imperative for our programs to communicate messages about changes that need to be made and that reinforce public health control efforts directly to clients, health workers, and other lay providers in clear, context-appropriate language.

## Models to implement

All communication strategies to be implemented by projects supported by FHI 360 should align with national ones to ensure a coordinated response. Measures to improve client experience and communication are described for two scenarios below.

**On-site:** Situations during this period when in-person contact between clients and providers should be minimized. Providers must ensure that services are safe by:

- Controlling the number of patients who come to the facility by calling all patients ahead of time.
  - Offer block appointments of one to five patients each
  - Delay visits that are not critical<sup>a</sup>
  - Offer alternative points for drug refills
- Conducting triage by phone on the day of the clinic visit to identify those who meet the national COVID-19 suspect or probable case definitions (using signs or symptoms and exposure history—updated and disseminated at national level; see Appendix 1 and 2 for examples from WHO<sup>3</sup> and Nigeria<sup>4</sup>). Based on triage outcomes, prepare clients for the visit or delay the visit as appropriate.
- Controlling the number of individuals who enter the ART clinic to maintain physical distancing.
  - Take temperatures through scalp scans
  - Ensure patients wash their hands before they enter the clinic, perhaps by altering patient flow to include use of a functioning hand washing station upon arrival
  - Ensure rapid and safe triage and isolation of patients with COVID-19 symptoms or symptoms of other respiratory infection (e.g., fever, cough) – see Appendix 4.
  - Minimize patients in waiting area, maintain at least 6 feet (2 meters) between them
- Increasing frequency of sanitizing of frequently touched clinic surfaces and equipment
- Giving health talks that incorporate COVID-19 messaging
- Using television screens (where available) in waiting areas to display appropriate messaging (see Appendix 3 for videos available through local resource websites)
- Displaying information, education, and communication (IEC) materials in conspicuous places within the clinic
- Distributing electronic IEC materials via SMS and social media as appropriate

**Off-site:** Messages delivered remotely to clients.

- Regular phone calls to deliver positive health messages, service delivery updates (e.g., location of drug pick-up, times of opening, etc.) and client support interactions via phone calls or SMS to clients

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<sup>a</sup> For example: clinical follow-up if healthy/no signs and/or symptoms, viral load sample collection for suppressed clients.

- Messages should be targeted and adapted, particularly when aimed at populations at higher risk for attrition or poor adherence (e.g., adolescents/young adults, migrant populations, etc.)
- Social media—e.g., WhatsApp, Facebook, Telegram—to deliver messages and allow clients to ask questions; could include chat “bots” in WhatsApp and Telegram
- Blast SMS for urgent communications, e.g., facility closures
- Mobile applications built to enhance self-care including to reinforce adherence, to deliver positive health messages adapted for each population, and to provide service delivery updates
- Mobile phone consultations in situations of significant movement restriction and inability of service providers to be present regardless of location
- Specify as part of messages delivered that for PLHIV who may have symptoms suspicious for COVID-19 or confirmed for COVID-19 who have been asked to remain at home as part of their management, it is important to continue ART.
- Additionally, clients must be informed that if a person living with HIV has to be admitted for COVID-19, they should take a 30-day supply of ART with them to the hospital because they will need to continue taking it. Once they reach the hospital, they should inform the attending physician that they are on ART. Messages to clients should also include that if any temporary interruption in ART is necessary because of illness requiring hospitalization, specific plans should be made to resume ART as early as feasible. Clients should be sure to request an adequate supply of ARVs upon or before discharge.

## Considerations

1. Overall phone penetration among clients, smartphone penetration, etc. Attention should be paid to what proportion of clients may be reached by each medium. For instance, if smartphone penetration is low, preference should be given to blast SMS. If a young population is targeted, social media can be given preference. Clinics should check patient registries to make sure phone numbers and other contact information are up to date—a test blast can be done to check what proportion were delivered, which numbers were not reachable, and how those clients may be reached.
2. Availability of Internet. To determine selection of media and channels for message delivery.
3. Message development and adaptation. A quick workshop to develop context-appropriate messages may be needed. Alternatively, available messages may need to be adapted or translated (see Appendix 3 for a list of sources).
4. Batching and matching of patients to decentralized pick-up locations.
5. Reviews among providers via teleconference (e.g., via Zoom, Microsoft Teams) to create a support- and experience-sharing community for service providers.

## How to scale up quickly

Project teams to begin immediate implementation of this key technical priority.

# Advancing decentralized distribution models

## Rationale

A number of factors make decentralized distribution (DD) of ARVs<sup>5</sup> and other medications a key priority during the COVID-19 pandemic. Recognizing the increased pressure on the public health sector, health workers will be less available to attend to ART patients since many may be involved in the COVID-19 response. PLHIV face increased risk of contracting COVID-19 when attending crowded clinics in public health facilities. The chance of hospitalization and death is increased for people (including PLHIV) with pre-existing conditions who become infected with COVID-19. Although current data does not confirm this, immunosuppressed PLHIV may be at potential risk of severe COVID-19. Additionally, as movement restrictions are enacted, it becomes increasingly difficult for PLHIV to access facilities for drug refills

Therefore, DD, which limits the number of patients visiting the health facility at the same time and makes refills available closer to where clients live, will both ensure continued ART and limit exposure of health workers and patients to COVID-19.

## Models to implement

A number of DD models can be positioned for rapid rollout. Some are shown in the table below and described more fully in the text that follows.

**TABLE 1. Features of decentralized distribution models**

Community pharmacy	Home delivery	Private hospitals	Ad hoc pick-up locations
<ul style="list-style-type: none"> <li>▪ Uses registered private pharmacies within communities</li> <li>▪ Refills for patients devolved from hub facilities</li> <li>▪ Supply chain of medications and service documentation linked to hub</li> </ul>	<ul style="list-style-type: none"> <li>▪ Delivers refills to clients' homes</li> <li>▪ Refills for clients of community pharmacies or hub facilities</li> <li>▪ Supply chain of medications and service documentation linked to hub</li> </ul>	<ul style="list-style-type: none"> <li>▪ Uses less crowded private hospitals within communities</li> <li>▪ Serve as service delivery hubs in themselves</li> <li>▪ Receives direct medication supplies from the national chain, sends reports directly through national system</li> </ul>	<ul style="list-style-type: none"> <li>▪ Uses satellite locations arranged to fill refill gaps</li> <li>▪ Closed schools, churches, primary health centers could serve</li> <li>▪ Supply chain of medications and service documentation linked to hub</li> </ul>

Advantages of each model	Community pharmacy	Home delivery	Private hospitals	Ad hoc pick-up locations
Reduces risk of COVID-19 exposure for clients and providers	√	√	√	√
Closer to where people live and reduces travel	√	√		√
Low set-up cost	√		√	√
Offers wide and flexible opening hours	√	√	√	√
Limits exposure of most vulnerable individuals		√		
Can be provided by community pharmacies, hub facilities, third-party delivery service and program staff		√		√
Can offer additional clinical and laboratory services			√	√
Can offer services beyond primary clients	√		√	

Differentiated service delivery models that include congregation of a sizeable number of persons (e.g., more than five) in an enclosed space will not be possible during the COVID-19 epidemic. For example, community ART refill groups (CARGs) may not be possible to implement in some countries where public transportation is not available and where curfews are in effect. All these models will need to be adapted. Where CARGs are still possible rather than meeting as a group, the CARG leader can do home delivery. Even so, this is discouraged during the COVID-19 pandemic unless measures are put in place to ensure physical distancing.

*Differentiated service delivery models that include congregation of a sizeable number of persons (e.g., more than five) in an enclosed space will not be possible during the COVID-19 epidemic.*

**1. Community pharmacy refills.** Many governments are already implementing lockdowns for their populations; however, pharmacies have remained open as a place of first call for health care. The community pharmacies will be a convenient point for pick-up of ARVs by patients under many lockdown scenarios since many are close to where patients live. See details below on how community pharmacy models can be used during COVID-19 as refill strategies.

**2. Home deliveries.** Under the lockdown scenario, public transport is normally affected making it challenging for patients to visit health facilities. In most countries, pharmacies are able to do home delivery of medicines. Home deliveries can be optimized in several ways.

- Community pharmacy to patient homes through:
  - Pharmacy courier (could be any pharmacy support staff other than pharmacist)
  - Designated person from the community
- Health facility pharmacy to patient homes through:
  - Community health workers
  - A third party (could be a formal delivery service or designated person from the community)
  - Postal service where the service does door-to-door delivery
  - Program staff

**3. Ad hoc pick-up or drop-off locations for ART.** In line with adaptability of drug deliveries, ART clinic staff could arrange and communicate an out-of-hospital location for drug refills to take place based on local guidance, e.g., closed churches, mosques, school classrooms, etc. This is particularly important for health facilities converted to COVID-19 isolation centers and for other hospitals while arrangements for community pharmacy pick-up are being finalized. Health workers should, as always, adhere strictly to infection prevention and control guidance.

**4. Private hospitals.** The pharmacies in private hospitals can serve as drug delivery locations for their own primary patients and those temporarily devolved from public facilities. In these cases, user fees may need to be waived for the duration of COVID-19 related disruptions.

## Considerations for decentralized drug delivery

- 1. Prioritizing, batching, and matching of patients to decentralized pick-up locations.** ART clinics (hub facilities) should review and prioritize patients for refill using line lists. Pick-up locations should then be assigned based on prioritization category and in agreement with clients. Patients older than 60 years and those with comorbidities<sup>6,7</sup> who stand a higher risk of COVID-19 morbidity and mortality should be considered priority clients and prioritized for home delivery where feasible. Other patients on ART should be grouped into those on MMD (3, 6) and those not. The approach is first to identify which clients are priority irrespective of whether on MMD or not. Once these are identified, other clients are then grouped into those on MMD or not. The resulting prioritized groups are then batched by the months when they are due for expected refills. A summary table for planning purposes is included below. This prioritization will help ensure that available stocks are used in the most appropriate manner (in this case for batch 1 and 2) in collaboration with the supply chain partner. Collecting stock on hand data and sharing that with supply chain partners will help ensure adequate stock for the planned refill months.

**TABLE 2. Patient prioritization summary matrix**

Priority Groups for Refill												
Refill Batch	Batch 1 (Due in April)			Batch 2 (Due in May)			Batch 3 (Due in June)			Batch 4 (Due in July)		
Dates scheduled												
Category	Priority clients	Others – on MMD	Others – not on MMD	Priority clients	Others – on MMD	Others – not on MMD	Priority clients	Others – on MMD	Others – not on MMD	Priority clients	Others – on MMD	Others – not on MMD
Refill location												
Home delivery												
Hub facility												
Satellite facility												
CARG*												
Community pharmacy												
Other (specify)												

\*For home delivery from the CARG leader or without a formal meeting of all CARG members.

- Appointment systems at decentralized pick-up points to space out client numbers over the course of the day.** Even when clients are devolved to decentralized points from hub facilities, it is important to implement a staggered appointment system that spaces out client refill time and contact with others. This also acknowledges that pharmacies may still be providing other services to the general public.
- Contact strictly for drug pick-up.** Ahead of scheduled pick-ups, clinical teams, where due, should arrange a teleconsultation. Additional prescriptions or amendments should then be communicated to the receiving pharmacy. This way, the pharmacy visit remains only for drug pick-up. During the pre-visit call, COVID-19 screening should be provided. Clients who meet the suspected case definition should be linked to the national COVID-19 surveillance team. Such clients should not present to the hospital for pick-up but remain at home. Home delivery would be arranged for such clients.
- Providers or staff doing home refills should adhere to the home refill protocol** (see Appendix 5). Calls ahead of refills can be done by clinical teams or appropriate lay workers.

5. **Measures to ensure physical distancing.** For example, outdoor space marking for clients to maintain physical distance while waiting for drug pick-up may be needed for larger pharmacies.

## How to scale up quickly

**Community pharmacy** decentralized drug delivery model should be scaled up quickly. Two scenarios exist—settings with ongoing community pharmacy delivery and settings without.

1. Where community pharmacies currently formally provide ART delivery services, project teams should review proportions of clients picking up refills from different pharmacies and map additional clients who can be served in the same community. Through online survey or by phone, assess potential capacity to expand coverage with existing pharmacies including arranging pick-up schedules to avoid congestion, and supply chain and storage capabilities. A draft devolvement of clients should involve one or two options to be reviewed over the phone with clients. A final devolvement schedule is then developed and communicated with the hub facility (which will then arrange for drugs for named patients to be transferred to the selected community pharmacy) and with client (who should receive the name of the pharmacy where their refill will be on a particular day and time).
2. Where no formal decentralized ART delivery through community pharmacies currently exists, project teams should quickly identify interested registered community pharmacies to act as pick-up points for ARVs for PLHIV. Pharmacy chains with multiple outlets can be prioritized as wider coverage can be achieved in a short period of time. Teams should also identify community pharmacies that already have experience in dispensing ARVs even though not enrolled in a formal DD model since this will reduce the orientation time. An online survey can be done to determine interest, location, staffing, infrastructure, and capacity gaps. Orientation of selected private pharmacies should be via teleconferencing channels such as Microsoft Teams, Skype, Zoom, or other platforms.

For **both settings**: Project teams can quickly set up a telephone or web-based support system for community pharmacy staff who may face challenges during the dispensing of ARVs. Use of app-based, web-based, or paper-based dispensing should be adapted to enable quick rollout and avoid treatment interruption. Systems such as the MyDawa System (Kenya), CPARP Mobile App (Nigeria), and ORA (Global) used to connect hospitals, community pharmacies, and clients can be quickly adapted to support DD during this emergency response. These systems allow seamless devolvement of clients from hub facilities, scheduling of appointments, service data reporting, and much more.

For **home delivery of ART**: This may be done by community pharmacies or project-supported teams or hospital pharmacy teams. For example, in Nigeria, 40 percent of the more than 5,489 clients on ART at Enwang primary health care clinic in Mbo local government area in Akwa Ibom State receive ART through home delivery and for others delivery is by courier to places such as churches or other locations in the community. While these innovations were necessary to address

retention challenges, this model holds promise to ensure patients can continue to receive ART under situations of movement restrictions, or to limit exposure of the most vulnerable.

Home delivery by private pharmacies should be explored and quickly implemented to ensure safe delivery of ARVs to PLHIV. Home delivery, if done under strict protocols, will drastically reduce potential exposure of PLHIV to COVID-19. Follow protocol for home delivery (see Appendix 5) both for those receiving deliveries and providers making deliveries.

For **ad hoc drug delivery points**: Teams should quickly review the potential of other nonclinical community pick-up points like retail shops, closed schools, or churches provided they are not congested. This should especially be explored in areas where other models described above are not possible.

## Leveraging multimonth dispensing (MMD) for ART, TPT, and CPT

### Rationale

As with decentralized drug delivery, MMD extends the time between drug refill pick-ups and thus minimizes the number of times the client needs to come in contact with the health facility/provider. Not only convenient and cost saving for the client, this strategy is protective and lifts some burden off health care workers and health systems struggling to cope with the COVID-19 pandemic. Integrating MMD for different drugs ensures that client needs are met at one time, there are no missed opportunities, and helps improve patient outcomes.

### Models to implement

#### *Integrated MMD*

MMD should be made the norm for stable patients<sup>b</sup> but in the light of COVID-19 considerations, should also be implemented for patients who may not qualify for MMD (under current local guidelines) namely those newly starting ART, on second line, or do not have a current viral load (VL). For ART and CTX, months of supply should range between three and six. For TB treatment and TPT, months of stock dispensed would depend on the drug regimen, stage of completion of treatment or prophylaxis regimen, and outcome of TB screening by phone or at time of drug refill.

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<sup>b</sup>There are different national definitions of stable patients. Projects should follow their national guidelines.

## Considerations

- 1. Ensuring all patients get MMD:**
  - Review supply chain and assess stock on hand. Ensure stock at hand is able to support 6MMD ART for all stable clients. If 6MMD is not feasible (due to stock concerns or policy barriers that should be escalated), 3MMD is the minimum acceptable. The goal is to provide the most amount of ART possible to mitigate treatment interruptions and minimize exposure/spread of COVID-19.
  - Because pediatric formulations are often in short supply, programs should make every effort to supply children and adolescents living with HIV who are initiating and refilling ART with a three-month supply of ARVs for those who weigh less than 20 kg and a six-month supply for those who weigh 20 kg or more. The caregiver should be allowed to pick up the child's medications without bringing the child to the ART clinic. If a child needs a clinical visit because he or she has a medical issue, the clinic should be made aware through a phone call so it can ensure that accommodations can be made including safe scheduling. For children requiring cotrimoxazole, a three- to six-month supply should be provided at the same time as ARV pickup. For children starting a new medication at the clinic, administration of the first dose should be demonstrated and administered in clinic, particularly LPV/r-based formulations (liquids, pellets, granules, and 100/25mg tablets).<sup>8</sup>
  - HIV-exposed infants should be given an adequate quantity of infant prophylaxis, both ART and cotrimoxazole as possible, to last until the next immunization or early infant diagnosis (EID) testing appointment.
  - Line list all patients who are on ART using the "no missed opportunities" checklist (see Appendix 6) and classify them by when they are due to get their next refill (see patient prioritization table above).
  - Pre-package MMD drugs (all drugs due) for each named client according to the visit schedule.
  - Contact those eligible to schedule appointments and deliver MMD.
  - Document and report MMD.
- 2. Making MMD safe** for patients not currently eligible as per local guidelines:
  - Periodic telephone follow-up should be made. This should be monthly at minimum with shorter frequencies (weekly or biweekly) for clients who need such close support, e.g., newly initiated on ART and may be at risk of defaulting (see guidance on telephone calls in Appendix 7).
  - Reinforcement of adherence messaging through SMS, WhatsApp, and other means such as mobile phone application as available.
  - Schedule follow-up VL sample collection to align with next refill where possible. Home collection of samples can also be done with appropriate planning.
- 3. Ensuring adequate stock of ARVs** through close communication with supply chain partners. This will include opening up more frequent communication platforms, e.g., weekly virtual

meetings; and implementing agreed-on actions such as sharing alerts about potential ARV stock-outs and advance information about planned ARV refills and stock on hand.

4. **Adjusting MMD.** As the COVID-19 epidemic affects global supply chains, countries need to monitor and rationalize current in-country stocks of ARVs and other essential medicines. This may necessitate adjusting MMD, providing refills for less than three months at a time. This will result in clients needing more frequent refills than before. In such circumstances the convenience and closeness of drug pick-up points is critical for uninterrupted supply of ARVs and appropriate rationing.

**TABLE 3. Aligning MMD for client medications in a “no missed opportunities” DSD approach**

	Client category	Recommended length of refill	
		3 months	6 months
ART	Stable clients	Only if there are stock limitations	Recommended
	Newly initiated, VL unknown	At a minimum	Preferable
	Unsuppressed	Yes, with more enhanced adherence counseling (EAC) provided by phone following management protocols including repeat VL	Yes, after VL review at 3 months in line with management protocols
TPT	Already commenced 3-month regimen	Enough refill to completion	Not applicable
	Already commenced ≥6-month regimen	Give 3 months only if this takes client to completion or ART is 3MMD	Recommended. If completion is <6 months away, give enough refill to completion.
	New TPT initiation	Align with ART refill	Align with ART refill
CTX	Align with ART refill	Align with ART refill	Align with ART refill

## How to scale up quickly

Develop a **line list** of clients using the “no missed opportunities” checklist (see Appendix 6). This can be integrated within electronic medical record (EMR) systems as a standard report output format, developed as modifications to Excel files generated from EMR, or created from paper-based folder audits. Existing line lists could also be updated for this purpose.

**Schedule appointments** and communicate to all patients: agreed delivery mode, scheduled date and time, refill location (see decentralized drug delivery section above), and a brief explanation about what to expect during the refill encounter (months of stock, drugs to be dispensed, etc.). COVID-19 symptom screening should be done during the call prior to pick-up or delivery.

Each designated pick-up point or home delivery team should **pack medications** ahead of client visits with adequate labelling—what medications are packed, quantity, dosing, length of use, and client unique code. This ensures that adequate medications are available and that the refill encounter will only serve as a pick-up, thereby minimizing contact and length of stay. Pre-packed items should include:

- Medications
  - Antiretrovirals for ART
  - Tuberculosis preventive therapy or TB therapy if on treatment
  - Cotrimoxazole
- Next appointment date/time and venue
- Other items depending on project specifics
  - Condoms and lubricants
  - Airtime, food, transport vouchers

**Safety for clients:** Ensure confidentiality so that home deliveries do not lead to inadvertent disclosure or increased risks of domestic violence. Each client should be contacted ahead of a home delivery and offered violence risk assessment through a standardized questionnaire; if any hints of domestic violence exist, other refill venues should be proposed and client linked to gender-based violence (GBV) support services.

Follow decentralized drug delivery guidelines above to ensure that integrated MMD delivery is available to patients for continuous HIV care during and after the COVID-19 pandemic.

## Ensuring retention

### Rationale

Providing continuous ART is a major goal of the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) treatment programs as this assures optimal client outcomes as well as community viral suppression required to achieve HIV epidemic control. All efforts geared at minimizing service disruptions should have the ultimate aim of ensuring clients are retained in care and achieve viral suppression.

### Models to implement

#### *Current clients*

Steps described above—clear communication with clients and re-calling clients for MMD refill in decentralized delivery locations—coupled with adequate service documentation will ensure retention of clients who are currently active in care. If clients miss appointments, immediate (same day) contact should be established and mode of ART delivery reviewed with the client. There may be issues preventing the client from accessing services through the mode earlier agreed. Such clients should be considered for home delivery and close adherence counseling.

#### *Clients currently lost to follow-up*

During the period of movement restrictions, clients who have been previously deemed lost to follow-up (28-day definition) may be reached to re-start ART. Line lists of clients lost to follow-up within the

current FY (since October 2019) should be made, and they should receive calls. Tracking outcomes should be well documented. When contact is established with a previously lost client, the link desk worker should ascertain reasons for discontinuation of service with the clinic. A COVID-19 screening and the process for assigning to a decentralized drug delivery model described above should follow.

## Considerations

- 1. Tracking appointment keeping.** All drug refill appointments during this period must be meticulously tracked using the routine registers or those adapted for decentralized refills. The line lists used to schedule appointments can also be improvised to track daily appointment keeping rates. During the day, clients yet to come can be called to remind them of service availability and to review if there were any challenges with drug pick-up. After service closure, on the same day, clients who did not show up should be called and rescheduled for another date but the same delivery model (if no barriers exist) or for another date and a different drug delivery mode (if barriers exist to accessing the previous agreed mode of delivery).
- 2. Documenting new refill dates within ART records.** It is important to update new refill dates in the central ART records. This extends length of active status in ART records—client folders, service registers—either electronic or paper based.
- 3. Harmonizing records from decentralized drug delivery and MMD.** This is very important for retention records at hub facilities. Failure to harmonize these records may lead to erroneously classifying active clients as lost to follow-up.

## How to scale up quickly

Mobile applications can be developed rapidly to capture data from decentralized drug delivery and sync it to central EMR servers where available. Where record keeping is paper based, a minimal set of data elements should be collected on paper forms and returned to hub facilities to update into ART registers and client records—electronic or paper based.

## General infection prevention and control considerations

See Appendix 4.

## Monitoring and evaluation

Routine data from established monitoring and evaluation (M&E) systems will be complemented by adaptations that will help capture and link data from decentralized locations. Custom indicators to monitor and track implementation in these locations should be developed and agreed on with local stakeholders. Data should be used to (1) track program performance in reaching clients and achieving objectives, (2) monitor progress with implementation including whether benchmarks and targets are met in a timely manner, and (3) measure the efficiency and effectiveness of the models being implemented.

Data analysis and use. Pharmacies and implementing partners will be supported to conduct regular analyses of routinely collected data to assess performance against targets and to identify areas of underperformance. Staff at all levels will be provided with simple tools to support granular analysis and visualization of their data in line with the [Total Quality Leadership and Accountability \(TQLA©\)](#)<sup>9</sup> framework.

**TABLE 4. MER and custom indicators**

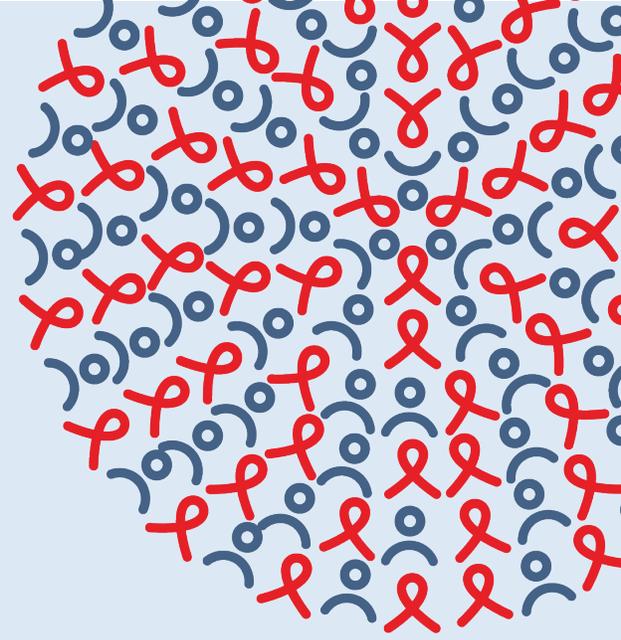
	Indicator	Definition	Level of reporting	Unit	Data source
1	No. of facilities providing ARVs as part of DD	<b>Numerator:</b> No. of facilities providing ARVs <b>Denominator:</b> NA	District	No.	Facility list
2	No. of individuals trained to dispense ARVs	<b>Numerator:</b> No. of individuals trained <b>Denominator:</b> NA	District	No.	Training reports
3	No. of patients enrolled in DD	<b>Numerator:</b> No. of patients enrolled in DDD <b>Denominator:</b> NA	District, sex, age	No.	DHIS (routine service data)
4	No. of ARV pick-up visits to facilities participating in DDD during the reporting period	<b>Numerator:</b> No. of ARV pick-up visits during the reporting period <b>Denominator:</b> NA	District, ARV dispensed (<3, 3-5, 6 or more)	No.	DHIS (routine service data)
5	No. of ART patients with no contact since their expected contact	<b>Numerator:</b> No. of ART patients with no ARV pick-up for greater than 28 days since their last expected ARV pick-up <b>Denominator:</b> NA	District, sex, age, outcome [died, lost to follow-up (LTFU), transferred back to facility, and refused stopped) treatment]		DHIS (routine service data)
6	Percentage of ART patients enrolled in DD with a suppressed viral load (VL) result (<1000 copies/ml) documented in the medical or laboratory records/laboratory information systems (LIS) within the past 12 months	<b>Numerator:</b> No. of ART patients with suppressed VL results (<1,000 copies/ml) documented in the medical or laboratory records/LIS within the past 12 months <b>Denominator:</b> No. of ART patients with a VL result documented in the medical or laboratory records/LIS within the past 12 months	District, sex, age,	%	Pharmacy report/DHIS routine data
7	No. of adult ARV bottles (units) dispensed by ARV drug category at the end of the reporting period	<b>Numerator:</b> No. of ARV packs (units) dispensed within the reporting period by ARV drug category (disaggregated by months supplied) <b>Denominator:</b> NA	District	No.	Pharmacy report

## Timelines

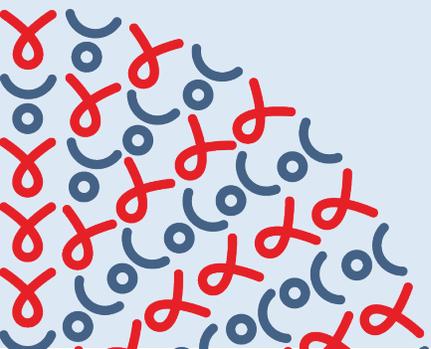
The COVID-19 pandemic is causing major strains on health systems, and swift action is needed to avert rolling back the gains made in HIV epidemic control. There is high anxiety among PLHIV, therefore country programs should make timely interventions to ensure continuity of ART and sustained viral suppression.

## Feedback

As we expect local adaptations to this guidance, we require an update on how your project is adapting this guidance within your local context. Please share with your performance optimization teams.



# Appendices



## APPENDIX 1

### Nigeria case definitions for COVID-19 (Version 4)<sup>10</sup>

#### Suspected Case

Any person (including severely ill patients) presenting with fever, cough or difficulty in breathing

**AND**

who within 14 days before the onset of illness had any of the following exposures:

1. History of travel to and more than 24 hours transit through any high-risk country\* with widespread community transmission of SARS-CoV-2

**OR**

2. Close contact with a confirmed case of COVID-19

**OR**

3. Exposure to a healthcare facility where COVID-19 case(s) have been reported

#### A probable case

Any suspect case

1. For whom testing for COVID-19 is Indeterminate test results

**OR**

2. For whom testing was positive on a pan-coronavirus assay

**OR**

3. Where samples were not collected before the demise of a suspect case

#### A confirmed case

Any person with laboratory confirmation of SARS-CoV-2 infection with or without signs and symptoms.

#### Health care worker infection

Any health care worker with moderate to severe respiratory illness reporting recent contact (<14 days) with patients with recent history of travel abroad and respiratory symptoms will be considered a suspect case.

*\*High-risk countries with widespread community transmission—China, Republic of Korea, Spain, Italy, Iran, Japan, France, Germany, USA, UK, Switzerland, Netherlands, Belgium, Norway*

## APPENDIX 2

### Global case definitions for COVID-19<sup>11</sup>

#### Case definitions for surveillance

Case and contact definitions are based on the current available information and are regularly revised as new information accumulates. Countries may need to adapt case definitions depending on their local epidemiological situation and other factors. All countries are encouraged to publish definitions used online and in regular situation reports, and to document periodic updates to definitions which may affect the interpretation of surveillance data.

#### Suspect case

- A. A patient with acute respiratory illness (fever and at least one sign/symptom of respiratory disease, e.g., cough, shortness of breath), AND a history of travel to or residence in a location reporting community transmission of COVID-19 disease during the 14 days prior to symptom onset;

OR

- B. A patient with any acute respiratory illness AND having been in contact with a confirmed or probable COVID-19 case (see definition of contact) in the last 14 days prior to symptom onset;

OR

- C. A patient with severe acute respiratory illness (fever and at least one sign/symptom of respiratory disease, e.g., cough, shortness of breath; AND requiring hospitalization) AND in the absence of an alternative diagnosis that fully explains the clinical presentation.

#### Probable case

- A. A suspect case for whom testing for the COVID-19 virus is inconclusive.<sup>c</sup>

OR

- B. A suspect case for whom testing could not be performed for any reason.

#### Confirmed case

A person with laboratory confirmation of COVID-19 infection, irrespective of clinical signs and symptoms. (See laboratory guidance for details: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/laboratory-guidance>)

#### Contact

A contact is a person who experienced any one of the following exposures during the 2 days before and the 14 days after the onset of symptoms of a probable or confirmed case:

1. Face-to-face contact with a probable or confirmed case within 1 meter and for more than 15 minutes;
2. Direct physical contact with a probable or confirmed case;
3. Direct care for a patient with probable or confirmed COVID-19 disease without using proper personal protective equipment;<sup>12</sup>

OR

Other situations as indicated by local risk assessments.

*Note: for confirmed asymptomatic cases, the period of contact is measured as the 2 days before through the 14 days after the date on which the sample was taken which led to confirmation.*

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<sup>c</sup> Inconclusive being the result of the test reported by the laboratory.

## APPENDIX 3

### Websites for COVID-19 materials from selected countries

Locality	Websites	Type of resource
Global	<a href="https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/myth-busters">https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/myth-busters</a>	Communication materials
	<a href="https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/videos">https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/videos</a>	
	<a href="https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance">https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance</a>	Protocols, case definitions, etc.
Cameroon	Twitter: Health Minister ( <a href="https://twitter.com/DrManaouda">https://twitter.com/DrManaouda</a> )	All resources
Burkina Faso	<a href="https://www.sante.gov.bf/corona-virus">https://www.sante.gov.bf/corona-virus</a>	All resources
Dominican Republic	<a href="https://sns.gob.do/">https://sns.gob.do/</a>	All resources
	<a href="https://www.msp.gob.do/">https://www.msp.gob.do/</a>	
Eswatini	Call 977 toll free	Communication materials
	<a href="http://www.gov.sz/index.php/component/content/">http://www.gov.sz/index.php/component/content/</a>	Protocols, case definitions, etc.
Kenya	Twitter: @MOH_Kenya ( <a href="https://twitter.com/MOH_Kenya?s=09">https://twitter.com/MOH_Kenya?s=09</a> ) <a href="http://www.health.go.ke/">http://www.health.go.ke/</a>	All resources
Malawi	<a href="http://malawipublichealth.org">http://malawipublichealth.org</a>	Communication materials
	<a href="https://www.health.gov.mw/">https://www.health.gov.mw/</a>	Protocols, case definitions, etc.
	<a href="http://malawipublichealth.org">http://malawipublichealth.org</a>	
Nigeria	<a href="http://covid19.ncdc.gov.ng/resources.php">http://covid19.ncdc.gov.ng/resources.php</a>	Communication materials
	<a href="http://covid19.ncdc.gov.ng/guidelines.php">http://covid19.ncdc.gov.ng/guidelines.php</a>	Protocols, case definitions, etc.
South Africa	<a href="https://sacoronavirus.co.za/">https://sacoronavirus.co.za/</a>	Communication materials
	<a href="https://www.nicd.ac.za/diseases-a-z-index/covid-19/covid-19-resources/">https://www.nicd.ac.za/diseases-a-z-index/covid-19/covid-19-resources/</a>	Protocols, case definitions, etc.
	<a href="http://www.health.gov.za/index.php/outbreaks/145-corona-virus-outbreak/465-corona-virus-outbreak">http://www.health.gov.za/index.php/outbreaks/145-corona-virus-outbreak/465-corona-virus-outbreak</a>	
Tanzania	Twitter: @elimuyaafya ( <a href="https://twitter.com/elimuyaafya">https://twitter.com/elimuyaafya</a> ) Instagram/Facebook: elimu ya afya YouTube: Afya online TV ( <a href="https://www.youtube.com/channel/UCru41WPLrjhYnf8FfOBqu-w/search?query=corona">https://www.youtube.com/channel/UCru41WPLrjhYnf8FfOBqu-w/search?query=corona</a> )	All resources shared through the social media handles.
Togo	<a href="https://covid19.gouv.tg/">https://covid19.gouv.tg/</a>	All resources
Uganda	<a href="https://www.health.go.ug/covid/">https://www.health.go.ug/covid/</a>	All resources
Zambia	<a href="https://www.moh.gov.zm/">https://www.moh.gov.zm/</a>	All resources
Zimbabwe	<a href="http://www.mohcc.gov.zw/index.php?option=com_phocadownload&amp;view=category&amp;id=14:press-statements&amp;Itemid=740">http://www.mohcc.gov.zw/index.php?option=com_phocadownload&amp;view=category&amp;id=14:press-statements&amp;Itemid=740</a>	All resources

## APPENDIX 4

### For infection prevention and control guidance for health care settings

Full guidance is available at the following links and should be adapted for all settings where ART services are provided.

- [https://ncdc.gov.ng/themes/common/docs/protocols/172\\_1583044210.pdf](https://ncdc.gov.ng/themes/common/docs/protocols/172_1583044210.pdf)
- <https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html>

#### Minimize Chance for Exposures

Ensure that for each site where ART services are provided, policies and practices are in place to minimize exposures to respiratory pathogens including SARS-CoV-2, the virus that causes COVID-19. Measures should be implemented before patient arrival, upon arrival, throughout the duration of the patient's visit, and until the patient's room is cleaned and disinfected. It is particularly important to protect individuals at increased risk for adverse outcomes from COVID-19 (e.g. older individuals with comorbid conditions), including service providers who are in a recognized risk category.

#### Before Arrival

- When scheduling appointments for HIV service (e.g., drug refill or VL sample collection), call patients ahead and screen for COVID-19. If clients meet suspected case definition, do not invite them to the ART clinic, instead support such clients to access testing and follow local guidance to accessing COVID-19 care. Such clients should continue their antiretroviral therapy.
- For clients that will come to the facility, advise on wearing home-made masks in line with local guidance, observance of hand and respiratory hygiene while at the facility. Schedule specific time for appointments.

#### Upon Arrival and During the Visit

- Consider limiting points of entry to the facility and set up triage stations at such points.
- Educate clients from entry point – use posters, give health talks.
- Repeat COVID-19 screening, enter records in a screening register. If any client meets suspected case definition, isolate in a pre-identified room, follow procedure for sample collection and transportation to COVID-19 diagnostic labs
- Take temperature using infrared thermometers for non-contact forehead scans.
- Service providers to wear masks and maintain at least 1m from all clients. See guidance on rational PPE use<sup>13</sup> and FHI 360 SOP for ART clinics for further details.
- Install hand washing bay, provide non-touch dispensers for alcohol-based hand sanitizers
- Consider installing physical barriers (e.g., glass or plastic windows) at reception areas to limit close contact between triage personnel and potentially infectious patients.
- Ensure rapid safe triage and isolation of patients with symptoms of suspected COVID-19 or other respiratory infection (e.g., fever, cough).
  - Prioritize triage of patients with non-COVID-19 respiratory symptoms.
  - Triage personnel should have a supply of facemasks and tissues for patients with symptoms of respiratory infection.
  - Isolate the patient in an examination room with the door closed or any other pre-identified room. Ensure the patient is not allowed to wait among other patients seeking care.
  - Identify a separate, well-ventilated space that allows waiting patients to be separated by 6 or more feet, with easy access to respiratory hygiene supplies.
  - In some settings, patients might opt to wait in a personal vehicle or outside the healthcare facility where they can be contacted by mobile phone when it is their turn to be evaluated.

#### Additional Considerations during Periods of Community Transmission:

- Learn more about how health care facilities can [Prepare for Community Transmission](#)
- Designate an area at the facility (e.g., an ancillary building or temporary structure) or identify a location in the area to be a “respiratory virus evaluation center” where patients with fever or respiratory symptoms can seek evaluation and care.
- Cancel group health care activities (e.g., group therapy, recreational activities).

## APPENDIX 5

### Decentralized drug delivery – home delivery protocol

For all home deliveries, providers are to follow this procedure.

#### BEFORE THE VISIT

- Call client to review care needs, explain drug delivery process, conduct violence risk screening and provide COVID-19 screening.
- If risk of violence exists, arrange other delivery methods e.g. private ad-hoc location
- If suspected/probable/contact case of COVID-19, arrange link to national testing service. Arrange drug delivery following extra precautions below. It is important that such clients continue their ART.
- If no risk of violence, continue to next step.
- During call, agree exact location of drug delivery ensuring to avoid unintended HIV status disclosure.
- Pre-pack drugs for delivery in two bags—an outer bag and a sealed inner bag
- Draw up a schedule of routes, delivery teams (minimum of two persons) and keep track of planned and successful deliveries for each day.

#### DURING THE VISIT

- Delivery team to verify existing and collect new details of each client including phone contact.
- When close to the home delivery location, call the client to inform of the impending arrival. Calls may also be needed if the address is difficult to trace.
- For drop-off, the delivery lead remains on the phone with the client till drop-off is completed.
- Carefully open the outer bag to reveal the inner bag without touching the inner bag. Place the inner bag on a spot agreed as the delivery lead talks with the client. The inner bag holds the pre-packed drugs and is transferred to the client in a non-touch process. Step back to the car. The delivery team to observe the client pick up the package. If no convenient spot is available, client to wear a home mask, and step outside to receive the inner bag, untouched by the delivery team.
- The outer bag will return back to the facility with the home delivery team.
- Document successful delivery (address located, client available for pick up, client observed picking up refill)
- Use unbranded vehicles for delivery as much as is feasible.
- Before the day's round of delivery ends, review unsuccessful deliveries and make calls to the clients for possible revisit on the same day.

#### AFTER THE VISIT

- Dispose of all outer bags properly.
- Delivery team to dispose masks and wash hands. Disinfect all reusable items.
- Summarize successful deliveries and update client records.
- Return to the facility those pre-packed drugs which were not delivered.
- Call all clients whose deliveries were not successful, review agreed delivery mode, and reschedule delivery for the next day.
- Synchronize service data with client records at hub facility.

#### Extra precautions when home delivery is to a PLHIV who has suspected or confirmed COVID-19 and is being managed at home

- Pack not less than 3 months of drugs to prevent repeated exposure for ART service providers
- Include medical grade masks in the pack for the client's use
- Delivery team to make the delivery the very last of the day's schedule and not more than one such delivery per day, per team
- Before making delivery, wear medical masks, gloves, and gown.
- Do not make contact with the client. Deliver the package to a pre-agreed spot. Patient or designated caregiver to pick the medication under the team's observation from a distance.
- Follow standard procedures to remove and discard masks, gloves, and gown.
- Disinfect all reusable items.

## APPENDIX 6

### “No missed opportunities” format for line listing clients

Line lists can be developed using this format or other local adaptations to ensure all due services are provided for clients.

#	Client name	Unique ID	Age	Comorbidity (ies)	Prioritization category (A)	Date due for ART refill	Date due for TPT refill	Date due for VL test	Date due for enhance adherence counselling if last VL >1,000	Drug delivery model agreed (B)	Pick-up point assigned	Date <u>scheduled</u> for integrated MMD	Date for VL sample collection
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													

(A) – Prioritization categories: 1-priority (age >60 or with comorbidity), 2-others on MMD, 3-others not on MMD

(B) – Drug delivery models: a. community pharmacy, b. home delivery, c. private hospital, d. ad hoc location

## APPENDIX 7

### Guidance for conducting phone discussions with clients on MMD

Steps	What to do	Status D/ND																				
STEP-1	Staff formally introduces him/herself to the client informing the client that this is a follow-up discussion as was agreed when medications were last dispensed.																					
STEP-2	<b>Assessing for medication adherence</b>																					
	<b>Find out</b> the client's medication-taking experience for the past 5 days (5-days recall) Estimate adherence using the following table:																					
	<table border="1"> <thead> <tr> <th colspan="2"><b>Once daily regimens:</b></th> <th colspan="2"><b>Twice daily regimens:</b></th> </tr> <tr> <th><b>ADHERENCE</b></th> <th><b>MISSED DOSES (in last 5 days)</b></th> <th><b>ADHERENCE</b></th> <th><b>MISSED DOSES (in last 5 days)</b></th> </tr> </thead> <tbody> <tr> <td>G (Good) ≥ 95%</td> <td>0 dose</td> <td>G (Good) ≥ 95%</td> <td>0 dose</td> </tr> <tr> <td>F (Fair) 85-94%</td> <td>0 dose</td> <td>F (Fair) 85-94%</td> <td>1 dose</td> </tr> <tr> <td>P (Poor) &lt; 85%</td> <td>1 dose</td> <td>P (Poor) &lt; 85%</td> <td>≥ 2 doses</td> </tr> </tbody> </table>	<b>Once daily regimens:</b>		<b>Twice daily regimens:</b>		<b>ADHERENCE</b>	<b>MISSED DOSES (in last 5 days)</b>	<b>ADHERENCE</b>	<b>MISSED DOSES (in last 5 days)</b>	G (Good) ≥ 95%	0 dose	G (Good) ≥ 95%	0 dose	F (Fair) 85-94%	0 dose	F (Fair) 85-94%	1 dose	P (Poor) < 85%	1 dose	P (Poor) < 85%	≥ 2 doses	
	<b>Once daily regimens:</b>		<b>Twice daily regimens:</b>																			
<b>ADHERENCE</b>	<b>MISSED DOSES (in last 5 days)</b>	<b>ADHERENCE</b>	<b>MISSED DOSES (in last 5 days)</b>																			
G (Good) ≥ 95%	0 dose	G (Good) ≥ 95%	0 dose																			
F (Fair) 85-94%	0 dose	F (Fair) 85-94%	1 dose																			
P (Poor) < 85%	1 dose	P (Poor) < 85%	≥ 2 doses																			
<b>Find out</b> if there were times client was unable to take the medications as recommended due to some challenges. <b>Find out</b> the challenges and work them out with the client																						
STEP-3	<b>Assessing for ADRs to ARVs, TB TX, TPT or other prescriptions</b>																					
	<b>FIND OUT</b> if client has had any unusual AND unpleasant experience that was not there before he/she commenced MMD, with or without INH. If yes, <b>GET</b> a description of the experience from the client.																					
	<b>FIND OUT</b> what the client has been doing to self-manage the situation.																					
	<b>PROVIDE</b> intervention in the form of an appropriate counsel to manage the described challenge and where warranted, <b>ADVISE</b> the client to call the designated provider for proper evaluation and management																					
STEP-4	<b>Provide adherence reinforcement and COVID-19 prevention messages</b>																					
	<b>PROVIDE</b> messages to reinforce adherence, what to do if there is a need for clinical attention, what numbers to call, and where to get accurate information. Also provide message on COVID-19 prevention—what to do and what to avoid. If any exposure happens or symptoms are experienced, what numbers to immediately call and how to reach the HIV service provider. <b>ADVISE</b> the client to call designated service provider when support is needed.																					
HINT-1	<b>Some TLD-associated ADRs noted from the field:</b>																					
	<b>Grade-2 ADRs reported in decreasing order of frequency includes:</b> Hallucination, increased appetite, weight loss, itching, sleeping disorders, vomiting, restlessness, abdominal cramp, weakness, rashes, tremor, joint pains, skin hyperpigmentation, dyspnea, numbness, hyperglycemia																					
	<b>Grade-3 ADR reported in decreasing order of frequency includes:</b> Hallucination, sleep disorder, increased appetite, hyperglycemia, vomiting, menstrual cessation, sweating, restlessness, fainting, joint pains, tingling sensation, painful menstruation, itching, abdominal cramp, dizziness																					
HINT-2	<b>Below are INH related ADRs documented in literature:</b>																					
	Peripheral neuropathy (10-20% of clients), loss of appetite, vomiting, stomach pain, weakness, dizziness, progressive liver damage that increases with age (2.3% in clients >50 years)																					
	Risk of fatal hepatitis especially in older clients as well as in those that take alcohol daily																					

## References

- <sup>1</sup> World Health Organization (WHO). Data as of April 17, 2020 (cited 17 April 2020). Available from: <https://covid19.who.int>.
- <sup>2</sup> World Health Organization (WHO). Coronavirus disease 2019 (COVID-19) situation report–51. 11 March 2020 (cited 17 April 2020). Available from: <https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200311-sitrep-51-covid-19.pdf>.
- <sup>3</sup> World Health Organization (WHO). Global surveillance for COVID-19 caused by human infection with SARS-Cov-2 - interim guidance 20 March 2020. Available from: <https://apps.who.int/iris/rest/bitstreams/1272502/retrieve>.
- <sup>4</sup> Nigeria Centre for Disease Control (NCDC). Case definitions for COVID-19 (version 4). Abuja (Nigeria): NCDC; 2020. Available from: [https://ncdc.gov.ng/themes/common/docs/protocols/186\\_1584531606.pdf](https://ncdc.gov.ng/themes/common/docs/protocols/186_1584531606.pdf)
- <sup>5</sup> Meeting Targets and Maintaining Epidemic Control (Epic). Decentralized distribution of antiretroviral therapy through the private sector: a strategic guide for scale-up. Durham (NC): FHI 360; 2019. Available from: <https://www.fhi360.org/sites/default/files/media/documents/epic-project-strategic-guide-scale-up.pdf>.
- <sup>6</sup> For example: cardiovascular disease, diabetes, chronic respiratory disease, hypertension, and chronic kidney disease. See: Centers for Disease Control and Prevention (CDC). Interim clinical guidance for management of patients with confirmed coronavirus disease (COVID-19). Atlanta: CDC; 2020 [revised April 3 and updates ongoing]. Available from: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html>.
- <sup>7</sup> World Health Organization (WHO). Coronavirus disease 2019 (COVID-19) situation report-51. Geneva: WHO; 2020. Available from: <https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200311-sitrep-51-covid-19.pdf>.
- <sup>8</sup> PEPFAR Technical Guidance in Context of COVID-19 Pandemic. [https://www.state.gov/wp-content/uploads/2020/05/05.13.20\\_PEPFAR-Technical-Guidance-During-COVID.pdf](https://www.state.gov/wp-content/uploads/2020/05/05.13.20_PEPFAR-Technical-Guidance-During-COVID.pdf)
- <sup>9</sup> Read more about TQLA: FHI 360. Total quality leadership and accountability. Durham (NC): FHI 360; 2019. Available from: <https://www.fhi360.org/sites/default/files/media/documents/resource-tqla-fact-sheet.pdf>.
- <sup>10</sup> Nigeria Centre for Disease Control (NCDC). Case definitions for COVID-19 (Version 4). Abuja (Nigeria): NCDC; 2020. [retrieved 7 April 2020] Available from: [https://ncdc.gov.ng/themes/common/docs/protocols/186\\_1584531606.pdf](https://ncdc.gov.ng/themes/common/docs/protocols/186_1584531606.pdf). Future versions will be available from <https://ncdc.gov.ng/diseases/guidelines>.
- <sup>11</sup> World Health Organization (WHO). Global surveillance for COVID-19 caused by human infection with COVID-19 virus-interim guidance 20 March 2020. This version was retrieved 7 April 2020 from <https://apps.who.int/iris/rest/bitstreams/1272502/retrieve> on the page [https://www.who.int/publications-detail/global-surveillance-for-human-infection-with-novel-coronavirus-\(2019-ncov\)](https://www.who.int/publications-detail/global-surveillance-for-human-infection-with-novel-coronavirus-(2019-ncov)).
- <sup>12</sup> World Health Organization (WHO). Infection prevention and control during health care when novel coronavirus (nCoV) is suspected-19 March 2020. Geneva: WHO; 2020. Available from: [https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-\(ncov\)-infection-is-suspected-20200125](https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-(ncov)-infection-is-suspected-20200125).
- <sup>13</sup> See also: WHO. Rational use of personal protective equipment (PPE) for coronavirus disease (COVID-19): interim guidance, 19 March 2020. Geneva: World Health Organization; 2020. Available from: <https://apps.who.int/iris/handle/10665/331498>.