Package of Services and Interventions for Advanced HIV Disease:

A Community Guide

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Contents

Acronyms and Abbreviations

AFRICOS	African Cohort Study
AHD	Advanced HIV disease
ART	Antiretroviral therapy
ARV	Antiretroviral
CALHIV	Children and adolescents living with HIV
CHW	Community health worker
CM	Cryptococcal meningitis
CrAg	Cryptococcal antigen
CSO	Civil society organization
CTX	Co-trimoxazole
DDD	Decentralized drug distribution
DQ	Data quality
DQA	Data quality assessment
DSD	Differentiated service delivery
EID	Early infant diagnosis
IEC	Information, education, and communication
IGRA	Interferon Gamma Release Assay
IIT	Interruption in treatment
IRIS	Immune reconstitution inflammatory syndrome
KP	Key population
LF-LAM	Lateral flow urine lipoarabinomannan
MER	Monitoring, evaluation, and reporting
MMD	Multimonth dispensing
MOH	Ministry of Health
OI	Opportunistic infection
OVC	Orphans and vulnerable children
PE	Peer educator
PEPFAR	U.S. President's Emergency Plan for AIDS Relief
PLHIV	People living with HIV
PN	Peer navigator

POC	Point of care
PrEP	Pre-exposure prophylaxis
SOP	Standard operating procedure
TB	Tuberculosis
TPT	Tuberculosis preventive therapy
TST	Tuberculin skin test
U=U	Undetectable = Untransmittable
VL	Viral load
WASH	Water, sanitation, and hygiene
WHO	World Health Organization

Purpose

This community guide is a tool for use by implementers at the community level to improve the identification and management of advanced HIV disease (AHD). In particular, it was designed for new HIV community programs in the process of establishing their AHD package of care services, as well as for programs that need to optimize and strengthen their AHD care services. HIV community programs can use the guide to improve and standardize the package of services offered to AHD clients across their implementation sites to enhance the overall quality of AHD care.

The guide describes the differentiated package of services that community-led programs funded by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) and supported by FHI 360 are responsible for providing to clients with AHD. It also outlines the key principles for programs to follow in delivering AHD services to targeted populations, and the ADH-related roles and responsibilities of outreach workers, peer navigators, peer educators, lay workers, and other nonclinical staff. Also covered are project-level systems coordination and advocacy activities for community programs to implement to improve their service quality and reduce mortality and morbidity due to AHD. Links to useful resources and tools which community programs can use or adapt to implement the interventions and services in the AHD package are also provided.

This document should be used to:

- Orient and guide HIV community program staff at different levels of program implementation on service delivery to AHD clients
- Plan for AHD services and interventions, especially at the community level
- Inform the supervision of AHD service delivery activities to ensure that clients receive appropriate services and support
- As a reference to develop standard operating procedures (SOPs) and community training modules

Introduction

Globally, 39 million people were living with HIV in 2022, and 29.8 million people were accessing antiretroviral therapy (ART).[1] An estimated 1.3 million people newly acquired HIV, and deaths due to HIV were 630,000.[2]

For adults, adolescents, and children 5 years or older, AHD is defined as having a CD4 cell count of <200 cells/mm^3 or World Health Organization (WHO) clinical stage 3 or 4 for those who are ART-naïve or returning to care after interruption in treatment (IIT). All children under 5 years are considered to have AHD at the point of diagnosis regardless of their clinical and immunological condition. This is due to their elevated risk of disease progression and death.

The PEPFAR-supported African Cohort Study (AFRICOS), a prospective cohort study with adults at risk of or living with HIV from four sub-Saharan African countries (Uganda, Kenya, Tanzania, and Nigeria), showed that despite a significant increase in ART coverage, decline in AHD rates lagged. Despite expanded access to ART and the rollout of WHO's test-and-treat strategy, the proportion of people living with HIV (PLHIV) presenting with AHD remains high and unchanged at approximately 20 percent to 30 percent. Mortality among PLHIV with AHD occurs within the first few weeks after presenting to care. While many AHD clients are hospitalized multiple times over the course of their lifespan, most people with AHD have relatively poor outcomes following discharge from the hospital, and reported deaths frequently occur at home. The provision of palliative care for individuals with AHD has high, but unrealized, potential.[3]

Delayed HIV diagnosis, linkage to care, and initiation on life-saving ART, as well as disengagement from care and ART treatment failure, are major contributing factors to HIV disease progression toward AHD and AIDS-related deaths. Timely identification of reasons for virologic failure is critical to inform appropriate care and to address AHD.[4] The population with AHD is heterogeneous, and understanding individual needs is vital for tailored services (**Figure 1**). Immediate linkage to opportunistic infection (OI) prophylaxis, person-centered differentiated service delivery (DSD), and holistic supportive community care is critical.

CD4 testing

CD4 cell count is an indicator of immune function in PLHIV and is used to determine the need for initiation of prophylactic treatment against OIs, including tuberculosis (TB) and cryptococcal meningitis (CM). With the advent of test and treat, HIV programs moved away from CD4 count testing at baseline. However, routine CD4 testing, along with the use of viral load (VL) testing to monitor response to ART, is still necessary to assess the immune status of an individual.

Opportunities to diagnose AHD may be missed if only clinical WHO staging is used, as shown by studies from Kenya, Malawi, Uganda, and Zimbabwe, where almost half (47 percent) of the individuals with CD4 <100 cells/mm^3 were classified as having WHO clinical stage 1 or 2 disease and on that basis, therefore, not identified as having AHD.[5] These people may remain undetected and can rapidly become seriously ill. With the recent release of the PEPFAR MER 2.7 indicators reference guide, CD4 test reporting became a priority. The numerator for two treatment indicators, clients newly enrolled on ART and

clients restarting ART after IIT (i.e., TX_NEW[i] and TX_RTT[ii]), was expanded to include disaggregation of CD4 count by age and sex, emphasizing the need for CD4 optimization and prioritization.

However, access to CD4 testing remains a challenge, and changes in the CD4 testing landscape are a contributing factor. Some types of point-of-care (POC) CD4 testing services are being discontinued (BD FACSPresto analyzer production will end in July 2024, and BD FACSCalibur and FACSCount will not be serviced in the future). Most countries are moving to VISITECT® lateral flow assay POC testing (**Image 1**), but the introduction of VISITECT® has presented operational challenges with implementation, including issues with test interpretation and quality assurance. Therefore, VISITECT® alone may be insufficient to fully replace the platforms being phased out.

Image 1. The VISITECT® CD4 lateral flow assay uses a cutoff of CD4 350 cells/µl, is easy to use, produces rapid results within 40 minutes, and requires no instruments or cold storage.

In the REALITY trial,[6] HIV-infected clients including adults, adolescents, and children ages 5 years or older with low CD4 counts (<100 cells/mm3) who initiated combination ART and enhanced antimicrobial prophylaxis resulted were found to have reduced rates of death at both 24 weeks and 48 weeks without compromising viral suppression or increasing toxic effects.

Challenges to AHD diagnosis and management

Challenges to diagnosing and managing AHD stem exist within the health system, among providers, among the clients themselves, and the funding context.

Health system

- Lack of integration between programs (i.e., shared priorities across different disease programs such as HIV and TB)
- Lack of monitoring and evaluation plan and/or indicators to monitor AHD (screening, diagnosis, and management)
- Lack of access among AHD clients to some medications such as 5-flucytosine and liposomal amphotericin B, which require highly skilled administration, and shortages of recommended OI-specific medications, such as fluconazole and Ambisome for CM.
- Use of available machines not optimized, issues with supply chain for reagents, frequent breakdown of machines
- Lack of national AHD-related guidelines and policy
- Frequent stock-out of reagents needed for CrAg-LFA testing

[i] TX_NEW: Number of adults and children newly enrolled on ART

[ii] TX_RTT: Number of ART patients who experienced IIT during any previous reporting period, who successfully restarted antiretrovirals (ARVs) within the reporting period and remained on treatment until the end of the reporting period

- Difficulty quantifying the need for new commodities due to limited demographic, epidemiologic, and historical consumption data as well as the need to coordinate quantification and procurement among several different donors and Ministry of Health (MOH) programs, such as those for HIV, TB, and immunization
- Lack of effective linkage between health facility, hospital, and community/home-based AHD care

Provider

- Lack of timely referrals, initiation of treatment, and requests for CD4 testing
  - Low levels of TB screening, TB treatment, and TB preventive therapy (TPT) coverage and completion
  - Low provider capacity and skills in systematic detection and clinical management of AHD
- Low provider skills for clinical management of seriously ill PLHIV
- Lack of community worker engagement and skills to provide services
- Suboptimal post-discharge follow-up, with ineffective linkages between communities and facilities
- Lack of individual data on the causes of treatment failure and HIV-related deaths among children and adolescents living with HIV (CALHIV) and adult PLHIV that would inform optimization of person-centered AHD prevention
- Suboptimal PMTCT program coverage and delayed identification of CLHIV and ART initiation due to inefficiencies along the cascade, such as insufficient decentralization of test-and-treat programs for pregnant women, weak mother-child pair follow-up systems, low caregiver literacy and peer support, strict or silent policies about age of status disclosure and HIVST for children, low coverage of pediatric HIV testing at high-risk entry points such as patient wards, malnutrition services, and immunization/wellness clinics

Clients

- Limited client literacy about HIV disease and progression to AHD
- IIT and poor adherence to ART and OI prophylaxis
- Stigma, including self-stigma and stigma from general society including health care providers, and discrimination affecting client willingness to seek health care

Funding

- Suboptimal or limited investments in community-based AHD screening and management and DSD for AHD
- Suboptimal funding and supply chain management of vital commodities for diagnostics, prevention, and treatment (e.g., CD4 testing, TB lateral flow urine lipoarabinomannan [LF-LAM], cryptococcal antigen [CrAg], fluconazole, TPT)
- Low CD4 testing coverage and limited availability of CD4 rapid testing
- Lack of funding for AHD package of care, OI diagnostics and testing commodities, and treatment or medication recommended by WHO and in national guidelines

Principles and considerations for AHD service delivery

Before the package of services for individuals with AHD is presented in this guide, it is essential to understand key principles and considerations for delivering high-quality care that contributes to improved health outcomes among all PLHIV and prevents the occurrence of AHD. These principles are applicable at all levels of service delivery, including the community level.

Tools to support provision of AHD care and management

- AHD Management and Care Toolkit
- 2-page community guide for AHD
- Annex 2. Adult community TB screening tool
- Annex 3. OVC community TB screening tool

1. Provide comprehensive, person-centered care

AHD encompasses a diverse group of individuals, each facing unique challenges. Some may be recently diagnosed with AHD, while others have been on treatment but are now experiencing complications. Additionally, individual characteristics such as age, comorbidities, socioeconomic status, and social support networks greatly influence their needs and care requirements. It is essential to recognize these differences and tailor care to the specific circumstances of each person. Adopting a person-centered approach allows service providers to offer individualized, holistic care that respects patient autonomy and preferences.

PLHIV often present with a multitude of complex health and psychosocial needs. Because addressing only one aspect of their care may not lead to optimal outcomes, service providers should offer a comprehensive range of medical, psychosocial, and support services to address these diverse needs effectively. These services may include AHD treatment, management of OIs, pain (including palliative care) and symptom management, mental health support, substance abuse treatment, nutritional assistance, and behavioral and lifestyle changes. Collaborative care involving multiple health care disciplines is often necessary to ensure delivery of holistic care.

Mental health and psychosocial support services can be made more accessible to clients by training case managers or other health providers to identify and refer those with mental health issues, strengthening referral networks, providing education on how to deal with mental health struggles, and teaching basic coping skills, facilitating support groups, offering widespread screening and referral for mental health conditions, training peers to provide psychological first aid to those in crisis, and providing free access (virtually or in person) to mental health and psychosocial support for those who need these services.

2. Address stigma and discrimination

Stigma and discrimination can be particularly pronounced for individuals with AHD due to visible symptoms or comorbidities. Service providers need to create safe, nonjudgmental environments that respect the dignity and rights of individuals living with HIV. To do this, community-based service providers should be trained to be sensitive to the unique challenges faced by AHD clients and to provide psychosocial support to address the psychological impact of stigma and discrimination. For example, the Health4All curriculum is a training resource on providing the recommended package of stigma-free services. Training should be followed with mentoring and supervision, and mechanisms for client feedback should be ongoing to gain important information on the effect of the training and need for further investment.

Ensuring client confidentiality and privacy is also critical to a service delivery environment free of stigma and discrimination. For community health workers (CHWs), peer educators (PEs), peer navigators (PNs), and case managers, this entails maintaining confidentiality and privacy when working with clients living with AHD. It is important to communicate that the confidentiality of clients and their families is ensured and to obtain clients' consent to share information with other health care providers. CHWs, PEs, PNs, and case managers should follow all applicable laws and regulations regarding client privacy and confidentiality.

3. Empower the community to advocate for and demand high-quality services

Peer support groups and advocacy organizations can play a vital role in the care of individuals with AHD. These groups can share lived experiences and offer practical guidance. Involving individuals living with AHD in peer-led programs and advocacy efforts can empower them to take an active role in their own care and improve overall well-being.

Communities play a critical role in ensuring that HIV services are accountable to beneficiaries and responsive to their complaints and feedback. Community monitoring for accountable and responsive services empowers program beneficiaries and civil society organizations (CSOs) and networks to routinely track client accessibility, quality, and satisfaction of HIV services. Through a solution-oriented process, communities can inform decision-making around the changes needed and monitor how well the changes ensure that clients, including those with AHD, receive optimal, client-centered HIV care and services. The process also provides a mechanism to raise concerns and voice need for immediate support. This includes providing feedback on services, proposing and negotiating solutions with health providers and other decision-makers, and monitoring progress toward addressing specific issues. **Community Monitoring for Accountable and Responsive Services** is a useful resource for this effort.

FHI 360's approach includes obtaining client feedback from multiple sources, including through LINK electronic client feedback systems, community score cards, and direct reporting of any adverse events to service providers, peers, or others. This enhances these accountability systems by training community teams to respond to adverse events reported through the system. Community and beneficiary leadership and meaningful engagement in the process are critical for authenticity, ownership, and sustainability.

4. Engage peers to support community-based AHD screening and management

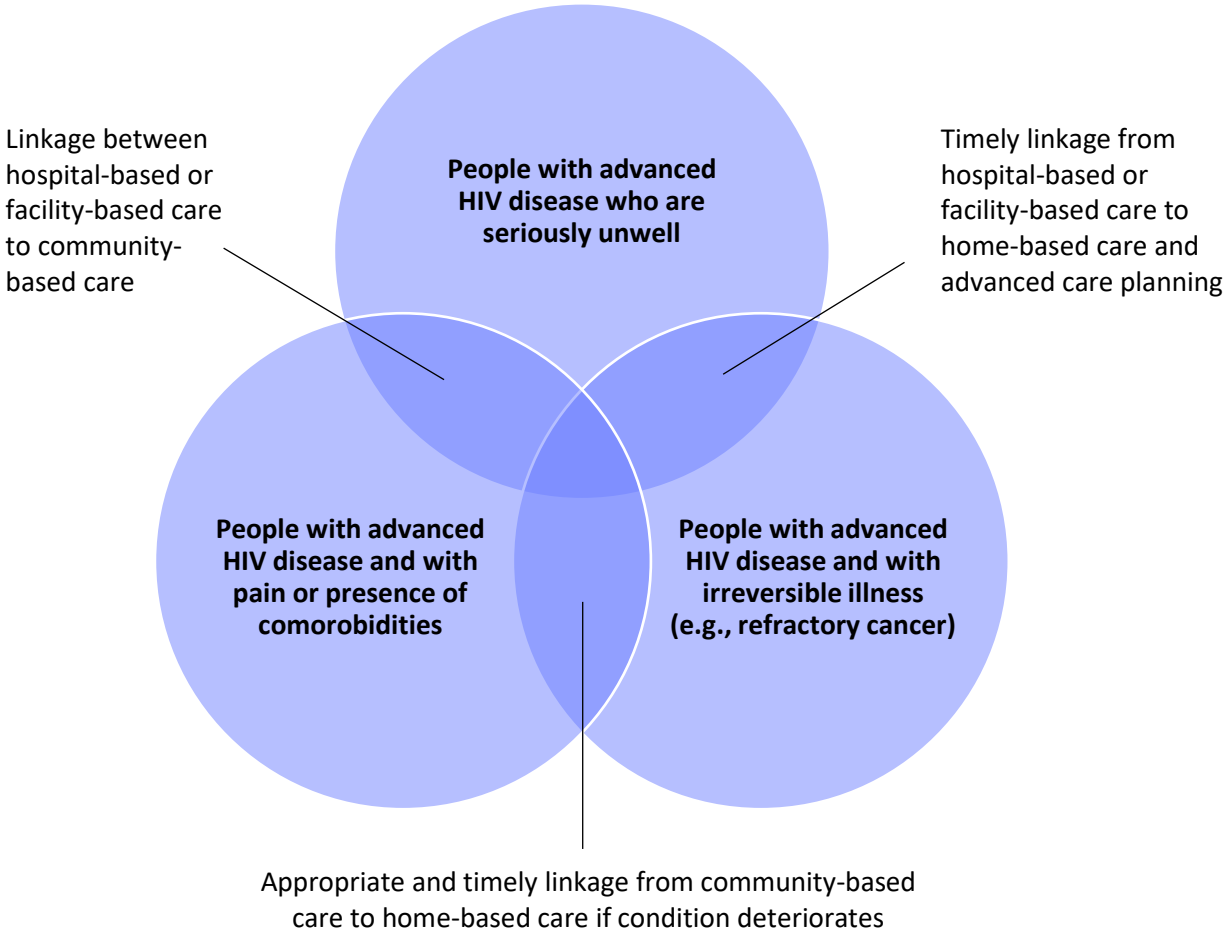
The range of decentralized, community-based interventions is improving AHD detection and care for those already identified as having AHD, contributing to optimized provision of the AHD package. Interventions leverage local potential, ensure synergies with health facilities, and adapt follow-up strategies to ensure treatment continuity. Roles for community-based support include:

- **Referral:** One role for community-based support concerns referral. Timely linkage from hospital- or facility-based care to home-based care and advanced care planning is critical. As AHD care is decentralized, HIV programs implementing community-based interventions should ensure efficient referral systems among the hospital, primary care facility, and community to make it convenient for clients to receive optimal services.
- **Access to care:** Community-based support from peers, including emotional support, improves client access to and continuity of care.

- **AHD screening and referral:** Community participation from CHWs, PNs, and PEs in AHD screening and referral is essential to improve detection.
- **Follow-up following hospital discharge:** Community-based peer support can provide close follow-up of those who were recently discharged from a hospital to prevent AHD recurrence, for which they are at high risk. AHD mortality among people successfully discharged from a hospital is as high as 30 percent.
- **AHD in children:** Early infant diagnosis (EID) and the provision of the AHD package for children can be optimized through engagement with the community and the use of community-based interventions.

It is important to pair decentralization of AHD screening, prevention, and management with capacity strengthening of community-based human resources. CHWs, PNs, and PEs should be trained to identify the symptoms of TB and CM, including headache and cough for longer than a week, weight loss, and high fever, and should accompany clients to the facility to ensure linkage to appropriate care. For community-based AHD follow-up care, CHWs should be trained to provide clients with ongoing support and enhanced counseling, monitoring tests, and home visits.

Figure 1. Linkages among facility, hospital, and community or home-based AHD care



Peer-led programs and community-based service providers can help optimize AHD screening and management by:

- Supporting early case finding and linkage to ART:
  - All children, adolescents, and people at risk of being exposed to or who may be living with HIV must be supported to know their HIV status and rapidly initiate ART if they test positive.
  - Supporting prevention of mother-to-child transmission (PMTCT) and the involvement of pregnant women to support HIV testing and HIV pre-exposure prophylaxis (PrEP) for mothers and children is part of such a prevention package.
- Working with orphans and vulnerable children (OVC) programs and key and priority population programs to screen for AHD and OIs, as well as for malnutrition among children, within adult and pediatric outpatient clinics and the community
- Supporting case profiling to identify those most at risk of poor ART adherence and IIT and propose targeted adapted solutions, psychosocial support, and follow-up to ensure efficient use of resources efficiently and relieve burden from facilities
- Monitoring adherence to ART and the overall health of PLHIV to ensure they are adhering to ART and in good overall health, particularly those under 5 years
- Providing care and support for CALHIV and all PLHIV who are too ill to access health care
- PLHIV, including children, who show signs of illness (e.g., fever, coughing, difficulty breathing, diarrhea, rapid weight loss or failure to gain weight, and headache) should be immediately referred and supported to go to a health facility for diagnosis and treatment. During household visits, community cadres can also monitor their adherence to any medications prescribed by clinical providers to treat illnesses and infections.
- Providing education to PLHIV about CD4 count, access to CD4 testing, interpretation of results, and the importance of follow-up clinical visits.

Package of care and interventions for AHD

WHO-recommended package of care[7]

The WHO AHD package of care is designed to promptly identify and appropriately manage clients with AHD. The AHD package of care is indicated for patients who are ART-naïve, have had IIT and returned to care, or who are suspected of treatment failure. Screening for AHD includes CD4 testing and WHO clinical staging of HIV infection and disease. WHO recommends a package of interventions to be offered to everyone presenting with AHD, including:

- Screening for OIs (Xpert MTB/RIF Assay for TB, LF-LAM for TB, CrAg for CM)
- Prophylaxis and pre-emptive treatment for major OIs (co-trimoxazole [CTX], TPT, fluconazole)
- Rapid ART initiation (defer only if meningitis) until there is evidence of a sustained clinical response to antifungal therapy and following four weeks of induction and consolidation treatment with amphotericin B–containing regimens combined with flucytosine or fluconazole or four to six weeks of treatment with a high-dose fluconazole induction and consolidation regimen. For TB/HIV coinfected clients, ART should be briefly delayed while investigating for TB among people with TB symptoms; TB treatment should be initiated first, followed by ART as soon as possible (within the first eight weeks of treatment).
  - TB/HIV coinfected clients who have severe immunosuppression (i.e., CD4 <50 cells/mm3) should initiate ART within the first two weeks of initiating TB treatment.
- Intensified ART adherence counseling

Screening for and referral of clients with AHD

All individuals newly diagnosed as HIV positive should receive CD4 testing, as should those who return after IIT of 12 months or longer, clients with unsuppressed VL, and clients with WHO clinical stages 3 and 4. Rapid, same-day ART initiation is a priority for clients with AHD, preferably within two weeks or as soon as they can tolerate any OI treatment. In cases of CM and TB meningitis, the initiation of ART must be delayed for weeks to months based on the client's clinical condition.

Screening for opportunistic infections in AHD

All PLHIV must be screened for TB and CM. Screening for TB includes Xpert MTB/RIF Assay and urine LF-LAM for TB and serum CrAg for CM.

Enhanced prophylaxis for TB and cryptococcal disease reduces incidence and hospitalizations with no increase in adverse events.[6] Early screening and treatment of OIs also improves ART adherence.[8]

Screening for TB

TB is the leading cause of mortality among PLHIV. At least 1 in 5 pediatric AIDS-related deaths are due to TB globally, and the largest TB case-finding gaps are among children. CLHIV have increased risk of TB exposure, infection, progression to disease, and TB-related morbidity and mortality.

Optimizing the screening, prevention, diagnosis, and treatment of TB can help improve the health of PLHIV, including children and adolescents. Routine screening for TB among all PLHIV, including children, is critical for timely linkage of TB presumptive cases to necessary care and support for adherence to TB treatment and to decrease HIV-related mortality.

Resources for HIV programs in the process of establishing, optimizing, and standardizing their AHD package of services

Peer Navigation Implementation Guide

Guidelines for Managing Advanced HIV Disease and Rapid Initiation of Antiretroviral Therapy (WHO)

Feasibility of Antiretroviral Therapy Initiation under the Treat-All Policy under Routine Conditions: A Prospective Cohort Study from Eswatini

Advanced HIV Disease in the Botswana Combination Prevention Project: Prevalence, Risk Factors, and Outcomes

Enhanced Prophylaxis Plus Antiretroviral Therapy for Advanced HIV Infection in Africa

WHO Consolidated Guidelines on Tuberculosis. Module 1: Prevention: Tuberculosis Preventive Treatment

Numerous non-sputum POC TB diagnostics are currently being evaluated, but many with limited sensitivity. These screenings are part of the standard service package, regardless of AHD status. Those found at risk of TB should be referred to a health facility for evaluation, diagnosis, and prophylaxis or treatment.

Screening for malnutrition

All children under 5 years should be screened for malnutrition. Malnutrition has been associated with morbidity and unsuppressed VL, particularly among children under 5 years. All CLHIV under 5 should be evaluated for malnutrition using the mid-upper arm circumference (MUAC) method. Nutritional supplementation (when paired with ART and other HIV services) can augment growth and improve outcomes among CLHIV; thus, children found to be malnourished should be referred to a health facility

for nutritional supplementation and counseling. As HIV clinical programs often offer nutritional support to PLHIV clients with malnutrition,[9] community programs should coordinate with ART clinics and clinical partners through their facility-based staff to ensure that malnourished children receive this support. Disseminated histoplasmosis should be diagnosed by detecting circulating histoplasma antigen in PLHIV using POC Ag LFA test (Miravista) where available.

Prophylaxis in AHD

Tuberculosis prophylaxis

TPT is indicated for all PLHIV without active TB. A repeat course of TPT should also be considered among PLHIV who previously completed a course of TPT but were later a household or close contact of a TB patient. Since currently available tests (tuberculin skin test [TST] and Interferon Gamma Release Assay [IGRA]) do not convert to negative after a complete course of TPT, they cannot be used to determine eligibility for a repeat course if a new exposure or reinfection occurs. Therefore, careful assessment of intensity of exposure and consideration of benefits versus harms should guide the decision to administer a repeat course of TPT.

Cryptococcal meningitis prophylaxis

CTX prophylaxis must be provided for all clients with AHD and those with CD4 below 350 cells/mm^3. This is different from preemptive treatment in CM, which is the treatment of positive serum CrAg test in an individual without symptoms of CM to prevent progression to CM disease.

Fluconazole should be provided to all people with a positive CrAg result. Even if CrAg screening is not available, fluconazole primary prophylaxis should be given to adults and adolescents living with HIV who have a CD4 cell count <100 cells/mm3 (possibly <200 cells/mm3).

Differentiated support for AHD

Clients with AHD require differentiated care and follow-up during the initial period of taking ART to monitor response and identify signs and symptoms of possible immune reconstitution inflammatory syndrome (IRIS). Clients with AHD can be identified at community, primary health care, and hospital levels.

The community service providers and case managers should work with health care providers to develop an individualized care plan that addresses the client's needs, including medication adherence, OI prevention, mental health support, and identifying and managing adverse events. Client-centered adherence counseling and education should focus on ART and treatment adherence, prophylaxis (e.g., TPT, CTX) adherence, and interventions to support/improve ART adherence. AHD clients missing appointments should also be rapidly tracked through phone calls, text messaging, or other mobile interventions including home visits. A home-based caregiver should be considered, with the consent of the client.

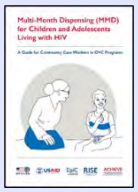
For hospitalized patients, follow-up measures are needed to reduce the risk of loss to follow-up and mortality after discharge. Clients discharged after hospitalization for AHD require more intensive follow-up. A differentiated package of care post-discharge should be developed depending on the setting to include, among others, nutritional support; water, sanitation, and hygiene (WASH) services; home-based care pack; comprehensive ART and OI drug monitoring; VL testing follow-up; and adverse event monitoring. Psychosocial support during home visits or groups sessions is encouraged to strengthen adherence and compliance to medication, as is directly observed therapy for children and clients with a

history of interruption of treatment and intensive follow-up for clients on second-line therapy to avoid treatment failure. Collaboration and partnerships with OVC programs are critical for effective follow-up and home-based care and support.

Clients should be educated by case managers and community service providers on Undetectable = Untransmittable (U=U) messages within health facilities, at the community level, and through home visits to emphasize early ART initiation and viral suppression. High-quality, comprehensive care, optimal ART, and person-centered differentiated care should also be provided, including multimonth dispensing (MMD) of drugs for prophylaxis and treatment. MMD is a type of DSD that provides clients with either three or six months of medication, eliminating the need for monthly or more frequent clinic visits. MMD has been shown to reduce the cost of travel and the number of work or school hours lost, and to reduce client burden. Additionally, services must be ensured to support ART adherence, access to VL testing (via conventional and/or POC platforms), and timely receipt of results for clinical management.

Resources

Multi-Month Dispensing for Children and Adolescents Living with HIV: A Guide for Community Case Workers in OVC Programs



Using Multi-month Dispensing to Improve Outcomes for Children and Adolescents Living with HIV in Nigeria: A Technical Brief

Provide services through differentiated service delivery models

The needs and challenges faced by individuals with AHD vary according to disease stage. Some may be experiencing advanced immunosuppression and complications such as AIDS-defining illnesses, while others can be asymptomatic. Care providers must tailor their services to the specific stage of the disease, ensuring that treatments and interventions are appropriate and effective, especially where resources are constrained. Using a hub-and-spoke DSD model enables strategic placement of essential interventions based on the health system's capacity, thereby optimizing access to these crucial services.

AHD care often involves a focus on aggressive ART, prophylaxis against OIs, and the management of severe complications. MMD for TPT, TB treatments, and CTX can be helpful and will minimize frequent facility visits. Decentralized drug distribution (DDD) of ARVs offers additional DSD options to AHD clients, bringing vital services closer and making them more convenient, which allows services to become more person-centered and supports treatment continuity. DDD includes home- and community-based models for refills and delivery of ARVs, prophylaxis, and OI treatment, including through adherence clubs, community ART distribution points, community ART groups, and private sector pharmacies and clinics. It has proven successful in reducing burdens for patients and their retention in care. Additionally, decentralized services can reduce the burden on health systems, decongest health facilities, and produce cost savings for donors, national governments, and clients. FHI 360 has experience supporting HIV programs to implement DDD through community pharmacies, private clinics, automated dispensing units, telemedicine, and home delivery through a third-party courier service provider. Distribution channels are selected according to client preferences and contextual feasibility (e.g., resources and legal framework).

Resource

The FHI 360/Meeting Targets and Maintaining Epidemic Control (EpiC) decentralized drug distribution package

Promote continuity of care and treatment

Continuity of care is vital in maintaining treatment adherence, monitoring treatment responses, and preventing further complications. Health care systems must facilitate smooth transitions between different levels of care as necessary, from inpatient to outpatient settings and from pediatric to adult care. Ensuring uninterrupted access to medication and support services is critical for individuals with AHD. Over the course of the HIV epidemic, peers have played a crucial role in supporting those on ART to continue treatment. In recent years, refinements to that model have significantly increased the effectiveness of peer cadres in assisting those struggling to start and stay on ART. Equipping peer supporters to tell their own stories with confidence and pride and featuring them in communications about HIV can have a transformative impact on people newly diagnosed with HIV or struggling with ART adherence. These approaches can be much more effective in helping those who interrupt treatment but return to care than existing "tracker tracer" models.

In addition, a range of case-management approaches can help AHD clients overcome structural and social barriers to establishing and maintaining long-term treatment compliance. There is usually one person who coordinates the case-management process, either physically or virtually through a case management system such as Online Reservation Application or the DHIS2 Individual Tracker. HIV programs should plan for, build, and strengthen case-management systems, including through the use of guidance and training for PNs, technical assistance for improving long-term adherence through the use of tailored support packages, and leveraging virtual case-management applications and devices to support clients remotely.

In summary, delivering high-quality care to individuals with AHD requires a comprehensive, person-centered approach that addresses their unique needs, respects their dignity, and promotes continuity of care. By adhering to these principles and considerations, health care systems can better support individuals to manage AHD and achieve improved health outcomes.

Project-level interventions

This section describes project-level interventions and activities HIV programs should implement for efficient provision of the AHD package of care at all levels of service delivery. Close coordination and collaboration between PEPFAR clinical and community partners (including OVC) is necessary to improve treatment outcomes for people with AHD. HIV programs should implement the following activities to enhance coordination and collaboration with HIV clinical partners:

- **Train community cadres and clinical staff.** Community and clinical programs are expected to support one another to build their capacity to provide the AHD package of care. Implementing partners can train clinical staff on family, cultural, and socioeconomic factors that may affect health-seeking behaviors and treatment continuity. Clinical partners can train community cadres on AHD care and treatment.

- **Place community staff in each health facility.** HIV programs should consider stationing a case manager in each health facility within their target geographic area, particularly in high-volume health facilities. The case manager will support coordination and bi-directional client referrals between the community program and each health facility along with other activities to ensure efficient services. Ideally, the case manager should be a nurse or social worker so they can easily interact and communicate with clinical providers.
- **Establish shared confidentiality agreements.** Community and clinical partners must agree on the joint responsibility to guarantee that personal client information remains confidential and is shared only with appropriate care team members.
- **Conduct routine data triangulation and review**, case profiling, and predictive analytics of AHD to identify risks within local contexts and propose adapted solutions. Community programs and clinical partners should hold regular information sessions to share programmatic updates, discuss challenges, and find joint solutions. Implementing partners providing community-based services should also regularly review and triangulate self-reported data with data in the health facility's electronic/paper-based patient information system. This will help the community program and clinical providers identify and address data discrepancies and programming gaps.
- **Monitor VL and CD4 count of all CALHIV and adult PLHIV.** HIV programs must monitor individuals' CD4 counts and VL to determine whether they are adhering to treatment and progressing toward viral suppression, or if they have high VL or low CD4 count and need additional support and testing for OIs. To monitor VL and CD4 count, community programs must obtain VL and CD4 test results from the facilities on a regular basis and establish an individual system that allows programs to track the VL and CD4 count of each individual.
- **Decentralize laboratory services and optimize the diagnostic network** to improve access to VL and other lab testing. Accessing facility-based services is sometimes difficult for PLHIV due to the distance from their home to the closest health facility, lack of money for transportation, illness, and other barriers. Thus, community programs should coordinate with clinical partners, health facility staff, or private sector partners to support differentiated VL testing services, especially for IIT, such as community or home-based VL testing.
- **Decentralize access to care** through home- and community-based refills and delivery of ARV, prophylaxis, and OI treatment drugs. Decentralized services require strong coordination and communication among community partners, clinical partners, health facility staff, and local health officials for streamlined person-centered care to PLHIV.
- **Coordinate and collaborate with supply chain management partners** to support access to MMD of ARVs. MMD improves adherence and facilitates achievement and maintenance of viral suppression. Coordination and collaboration with supply chain partners, the MOH, and community partners are critical to ensure uninterrupted supplies. Monthly and quarterly joint meetings are recommended.
- Develop SOPs, job aids, and information, education, and communication (IEC) materials for use in the education of PLHIV and providers, including clinical and community cadres.

Monitoring and evaluation

Continuous monitoring and evaluation of care

To ensure the effectiveness of care delivery, continuous monitoring and evaluation are essential. Regular assessment of treatment outcomes, adherence to care plans, and patient satisfaction help identify areas for improvement and optimize service delivery. Data-driven decision-making ensures that care remains patient-centric and evidence-based.

Monitoring and evaluation for AHD should be implemented within the existing community data reporting systems for HIV in the host countries or project:

- The service monitoring approach for community activities should adapt the community-led monitoring platform, where community members are empowered to provide feedback and suggestions for how improve on services they receive. Topics for feedback can include challenges around adherence, quality of services, provider attitudes, and stigma, among others. Rigorously trained peer monitors should be supported to systematically and routinely collect and analyze qualitative and quantitative data on community AHD service delivery. A rapid feedback loop with facility case managers and providers should be established for issues that require immediate attention.
- Additional information on community AHD activities and interventions should be gathered through qualitative data collection during implementation as well as through new or revised tools and data triangulation with the existing community HIV monitoring system.
- The reporting frequency should follow the project or host country's reporting system and frequency (either monthly or quarterly).
- Data for TX_NEW and TX_RTT indicators should be disaggregated following the FY24 MER 2.7 indicator reference guide, where the numerator is disaggregated by CD4 count, sex, and age. Reporting should follow the existing reporting flow levels in the project or host country.
- The data quality assurance mechanism for the community AHD data will follow the country's data quality (DQ) activities and systems and FHI 360 systems and tools. Using the FHI 360 data quality assessment (DQA) tool. Countries are encouraged to conduct DQAs for AHD-specific data and to report through the DQA reporting system and dashboard.

Community-level indicators

The following custom indicators should be considered:

- Number of PLHIV clinically screened for AHD in the community setting
- Number of PLHIV clinically screened for AHD in the community setting and suspected to have AHD who were referred to facilities
- Number of AHD clients clinically screened for OIs (TB, CM) in the community setting
- Number of AHD clients clinically screened for OI (TB, Crypto) in the community setting and referred to facilities
- Number of children under 5 years screened for malnutrition and referred to facilities
- Number of AHD clients reported to have interrupted treatment who were followed up in the community
- Number of AHD clients who were followed up and received adherence counseling in the community

Annex

Annex 1. Adult community TB Screening tool

Community Tuberculosis (TB) Screening Tool for People Living with HIV (PLHIV) Including Key Populations (KPs)

Description and purpose: This tool is intended for systematic symptom screening of adults living with HIV, including KP individuals, and household contacts who may be at risk of exposure to TB, developing TB disease, suffering poor outcomes from the disease, or some combination of these. The tool is designed for use by a community health worker, community supporter, or peer navigator/peer educator who is trained on TB and HIV during **each** home visit, community drug pick-up, community outreach, and when there is a notified TB case in the household. TB screening should be done **every two** months in the community.

Instructions: All parts of the screening tool should be completed. Please circle the correct answer.

Project Name:		**Province/District:**	
Site Name/Implementing Partner:		**Community Health Worker/Peer Navigator/Peer Educator's Name:**	
Client's First Name:		**Client's Last Name/Surname:**	
Registration/Unique Identification Number: **Unknown [ ]**		**Date of Birth:** ***[DD/MM/YYYY]***	
Age in years [ ] Unknown [ ]		**Gender: (1) Male, (2) Female, (3) Transgender, (4) Gender nonconforming**	**Weight in Kgs:**
Date: ***[DD/MM/YYYY]***			
PART A: SCREENING			
1	Has the client experienced any of the following symptoms? ***READ ALOUD***	1. A cough for any duration 2. Unexplained weight loss 3. Fatigue 4. Unexplained fever for more than 3 days 5. Night sweats for no known reason 6. Hemoptysis (coughing up blood) in the sputum	
2	Has client been exposed to/in contact with anyone with the symptoms in Q1 or with anyone known to be infected with or exposed to	1. Yes 2. No 3. If YES, who (relation)? _____	

	TB at home in the last 2 years?	
3	If Yes to Q2, is/was it TB of the lungs?	1. Yes 2. No 3. Don't know
4	Is the person with TB on treatment?	1. Yes 2. No 3. Don't know
5	Has that person completed TB treatment?	1. Yes 2. No 3. Don't know
6	If Yes to Q5, are they well now?	1. Yes 2. No 3. Don't know
Refer CLIENT for further evaluation by a medical officer/health care worker if the CLIENT has any of the symptoms listed in Q1 or if in contact with a person with TB at home.		
7	Is this client a presumptive TB case?	1. Yes 2. No

PART B: DIAGNOSIS AND TREATMENT (Complete after final evaluation by medical officer.)		
Date *[**DD/MM/YYYY**]*:		
8	What was the medical officer's diagnosis of the client?	1. TB disease 2. TB infection 3. No TB disease or infection 4. Referred for further evaluation at a health center/district hospital
9	What action was taken by medical officer?	1. Started TB disease treatment regimen Date: *[DD/MM/YYYY]* _____ Started TB preventive treatment regimen Date: *[DD/MM/YYYY]* _____ 2. No treatment for TB disease or infection

NB: If diagnosed with TB, provide support for treatment.

Annex 2. OVC community TB screening tool

Community Tuberculosis (TB) Screening Tool for Orphans and Vulnerable Children (OVC)

Description and purpose: This tool is designed to systematically screen OVC who may be at risk of exposure to TB, developing TB disease, suffering poor outcomes from the disease, or some combination of these. The tool should be used by a case manager trained on TB and HIV during **each** OVC home visit and when notified of a TB patient in the OVC's household. TB screening should be done **every two** months.

Instructions: All parts of the screening tool should be completed. Circle the right answer.

Project Name:		**Province/District:**
Site Name/Implementing Partner:		**Case Manager's Name:**
Child's First Name:	**Child's Last Name/Surname:**	
Registration/Unique Identification Number:		**Date of Birth:** ***[DD/MM/YYYY]***
Age in years [ ]	**Gender: (1) Male, (2) Female**	**Weight in Kgs/Percentile:**
Date: ***[DD/MM/YYYY]***		
PART A: SCREENING		
1	Has the child experienced any of the following symptoms? ***READ ALOUD***	1. A cough for any duration 2. Unexplained weight loss/not growing or gaining weight like other children of same age 3. Reduced playfulness/fatigue 4. Unexplained fever for more than 3 days 5. Adenopathy (swelling in the neck) for more than 1 month 6. Night sweats for no known reason 7. Hemoptysis (coughing up blood) blood in the sputum
2	Has child been exposed to/in contact with anyone with the symptoms in Q1 or with anyone known to be infected with or exposed to TB at home in the last 2 years?	1. Yes, father 2. Yes, mother 3. Yes, siblings 4. Yes, other living in the same house 5. No
3	If Yes to Q2, is/was it TB of the lungs?	1. Yes 2. No 3. Don't know
4	Is the person with TB on treatment?	1. Yes 2. No 3. Don't know

5	Has that person completed TB treatment?	1. Yes 2. No 3. Don't know
6	If Yes to Q5, are they well now?	1. Yes 2. No 3. Don't know
Refer CHILD for further evaluation by a medical officer/health care worker if the CHILD has any of the symptoms in Q1 orif in contact with a person with TB at home.		
7	Is it a presumptive TB case?	1. Yes 2. No 3. Not referred

PART B: DIAGNOSIS AND TREATMENT (Complete after final evaluation by medical officer.)		
Date: ***[DD/MM/YYYY]***		
8	What was the medical officer's diagnosis of the child?	1. TB disease 2. TB infection 3. No disease or infection 4. Referred for further evaluation to a health center/district hospital
9	What action was taken by medical officer?	1. Started TB disease treatment regimen Date: *[DD/MM/YYYY]* _____ Started TB infection Treatment Regimen Date: *[DD/MM/YYYY]* _____ 2. No treatment

NB: If diagnosed with TB, provide support for treatment.

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Cover photo credit: Mbuto Machili for FHI 360. Caption: In the Cabo Delgado Province in Mozambique, the Integrated Response to Affected Mozambique Populations (IRAMP) project works to provide emergency health, protection, and water sanitation and hygiene (WASH) assistance. Lina Amade* is an adolescent at a safe healing and learning space in the Metuge District. *Name has been changed.