

# Overview

Overview of the AHD module

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# Introduction

## What is Advanced HIV Disease (AHD)?

Advanced HIV Disease (AHD) refers to a stage of HIV infection where the immune system is severely weakened, typically defined by:

- CD4 count < 200 cells/mm<sup>3</sup>, or
- WHO clinical stage 3 or 4 conditions.

It often includes opportunistic infections such as TB, cryptococcal meningitis (CM), or other severe clinical manifestations.

## Why AHD Screening is Important

- Early identification of patients at high risk of opportunistic infections.
- Integration with ART workflows to streamline management.
- Compliance with WHO AHD guidelines.

## Integration into EMR

The AHD module is designed to work within the Point of Care (POC) ART module of the national EMR, facilitating early detection and prompt treatment.

## Goals

- Improve patient outcomes through earlier detection.
- Standardize AHD data collection.
- Enable real-time decision-making at the facility level.

# Functional Requirements

The following are the functional capabilities required for the AHD module within the ART POC system.

## 1. User Management

- Create and manage user accounts.
- Assign roles and permissions (e.g. ART Provider, Clerk, Administrator).

## 2. Client Registration

- Capture patient demographics:
  - Name, birth date, gender, region, village, phone number, etc.
- Generate unique patient identifier and barcode.

## 3. AHD Screening Workflow

- Trigger AHD screening based on:
  - Vitals (e.g., fever  $\geq 39^{\circ}\text{C}$ , HR  $\geq 120$  BPM)
  - CD4 count  $< 200$
  - WHO stage 3/4
  - Reported symptoms
- Prompt for TB/CrAg screening, KS symptoms, and drug prescriptions.

## 4. OI Screening & Lab Orders

- Enter and order tests:
  - CD4
  - TB (LAM, microscopy, culture)
  - CrAg (Serum and CSF)
- Capture results and link to patient record.

# 5. Summary & Follow-up

- Provide AHD summary with test results.
- Support next appointment booking based on assessment outcome.

# CD4 Testing and Staging Workflow

## Purpose

This page outlines the clinical workflow for CD4 testing and AHD staging within the ART POC module.

## Step-by-Step

- 1. CD4 Test Entry**
  - Enter CD4 result or place lab order.
  - Capture test location and date.
- 2. Auto-Staging**
  - System computes WHO staging based on symptoms and test results.
  - CD4 < 200 triggers AHD warning.
- 3. Trigger Criteria for AHD Screening**
  - CD4 < 200
  - WHO stage 3 or 4
  - Critical illness flags from vitals
- 4. System Prompt**
  - System presents a pop-up:

“Client meets AHD screening criteria. Proceed to OI screening?”

## Data Elements

Field	Type	Required	Notes
cd4_result	Integer	Yes	Required for AHD trigger
test_date	Date	Yes	
test_location	Text	Yes	Lab name