CHAPTER EIGHT:
MONITORING AND EVALUATION

8.1. Introduction to HIV/AIDS Program Monitoring & Evaluation (M&E)

Effective HIV prevention, care and treatment require standardized recording and reporting system. Recording and reporting is used to systematically monitor and evaluate progress of program performance.

The reporting of HIV prevention, care and treatment activities is integrated into the DHIS-2 and all forms and registers are standardized in line with it throughout the country. Health facilities are the primary sources of data. Any information concerning PLHIV should be recorded completely and correctly. Recording and reporting tools should be kept neat and maintained properly.

This guide on monitoring and evaluation of HIV in the health sector brings together the various elements of monitoring and evaluation systems for HIV program.

In order to establish a functional national HIV M&E system, the following key elements are important.

1. Presence of an M&E unit: Established M&E unit with qualified staff and enough budget. The unit also needs to build links with regions, sector ministries, research institutions, NGO, FBOs, civil associations and donors.

2. Clear goals and objectives of the program: It needs well-defined national program goals, objectives and targets where regular reviews/ evaluations of the progress of the implementation of the National/Regional program is undertaken. Guidelines and guidance need to be put in place on the M&E to regions and sectors.

3. A core set of indicators and targets: It is important to identify priority/core indicators and additional indicators that cover program inputs, activities/processes, outputs, outcomes and impact. In addition, selection of indicators needs to be through full participation of stakeholders and maintaining relevance and comparability.

The process needs also to utilize past and existing data collection efforts (e.g. DHS, BSS and Sentinel Surveillance) to assess national trends.

The main sources of data for HIV monitoring could be:

- Routine data sources such as DHIS2, CBS, EMR-ART
- Surveys like EDHS and EPHIA
- Estimations such as Spectrum, CSA estimates and research

4. Routine Monitoring: For HIV results at all levels to be measured, the entire spectrum of input, output, outcome and impact data are needed. Input and output monitoring data are important, as these answer questions about the resources and interventions needed and provided, and whether planned programs have been implemented. Input and output monitoring data are collected through routine monitoring systems. A plan for data collection and analysis: An overall national level data collection and analysis plan is important. The plan also has to address data collection and analysis systems at lower levels.

5. A clear plan for data dissemination and use: Establishment of an overall national level data dissemination plan is important.

8.2. Key Indicators

1. Number of individuals receiving Pre-Exposure Prophylaxis

Definition	Number of individuals, inclusive of those newly enrolled, that received oral antiretroviral pre-exposure prophylaxis (PrEP) to prevent HIV infection during the reporting period.
Formula	Number of clients that received Pre-exposure Prophylaxis during the reporting period
Interpretation	This indicator intends to measure number of clients who are taking PrEP within the reporting period. It counts the number of individuals that received PrEP at ANY point during the reporting period. It includes those who have been enrolled in the previous period and receiving PrEP and those who are newly enrolled in the reporting period. It excludes those who have been enrolled to PrEP but stopped taking it due to different reasons. Use of PrEP may cease once an individual is no longer at risk for HIV. Once they cease taking PrEP, they will not be counted.
Disaggregation	**PrEP New and PrEP Current** **Age** **Sex** **Client Category:** ■ Female sex workers (FSW) ■ Discordant Couples
Sources	PrEP Register and Tally Sheet
Reporting level	HC/ Clinic/ Hospital
Reporting frequency	Monthly

2. Number of persons provided with Post-Exposure prophylaxis

Definition	Number of persons provided with post-exposure prophylaxis (PEP) for risk of HIV infection through occupational and/or non-occupational exposure to HIV.
Formula	Number of persons provided with post-exposure prophylaxis (PEP) for risk of HIV infection as per the national guideline.
Interpretation	The indicator can be generated by counting the number of individuals receiving PEP for occupational and non-occupational purposes. And individuals should only be counted if they have received PEP drugs. PEP services for occupational exposure include a comprehensive package of services for occupationally exposed health care workers and patients. PEP services for non-occupational exposure include sexual violence. Individuals should be counted only if they have received PEP drugs (in accordance with national protocols). This indicator does not intend to capture the type and quality of PEP services provided. PEP services include first aid, counseling, testing, provision of ARVs, medical care, trauma counseling, linkages with police, and other follow-up and support. Simple monitoring of PEP availability through program records does not ensure that all PEP-related services are adequately provided to those who need them.
Disaggregation	Exposure type: ■ Occupational, ■ Sexual Violence ■ Other non-occupational
Sources	Post Exposure Prophylaxis Register
Reporting level	HC/ Clinic/ Hospital
Reporting frequency	Monthly

3. Percentage of people living with HIV who know their status.

Definition	Percentage of people living with HIV who know their status	
Formula	Number of people living with HIV who know their status Estimated Number of people living with HIV	X 100
Interpretation	This indicator can be used as a proxy for the first 95 target of the 95-95-95 HIV targets. It is Critical to determine the proportion of people living with HIV who know their HIV status, as this knowledge is the entry point to the continuum of care for PLHIV. The three 95s are: ■ 1st 95 = 95% of all people living with HIV will know their HIV status. ■ 2nd 95 = 95% of all people with diagnosed HIV infection will receive ART ■ 3rd 95= 95% of all people receiving antiretroviral therapy will have viral suppression **The numerator should be the sum of:** ■ PLHIV who were reported as currently on ART in the previous reporting month ■ Total new HIV positives identified through HTS in the reporting period ■ Total number of lost in the reporting period. Limitation of this indicator: This indicator may miss those previously identified positives and who are alive and not started on ART. At onal, Woreda and facility levels, it is difficult to get estimates of PLHIV to compute the first 95. Therefore, these levels should monitor HCT uptake (Number of people tested for HIV) and its yield (Number of people tested positive for HIV).	
Disaggregation	**Age/Sex** **HIV test result:** Positive, Negative **Testing modality:** VCT, PITC, ICT **Population groups:** FSW, IDUs, Long distance drivers, Mobile worker /Daily Laborers, Prisoners, OVC, Children of PLHIV, Partners of PLHIV, Other PPs (Widowed, Divorced, Separated, Re-Married), General population	
Sources	PITC tally and VCT register, PMTCT Register, ART register	
Reporting level	HC/ Clinic/ Hospital	
Reporting frequency	Monthly	

4. Number of individual HIV self-test Kits Distributed

Definition	It is the number of HIV self-test kits distributed
Formula	Numerator: Number of individual HIV self-test kits distributed Denominator: N/A
Interpretation	This indicator aims to monitor trends in the distribution of HIV self-test kits at the lowest distribution point. HIV self-testing refers to a process in which a person collects his or her own specimen (oral fluid or blood), performs an HIV test, and then interprets the results. This is often done in a private setting, either alone or with a trusted person. HIV self-testing is a screening test and requires self-testers with a reactive (preliminary positive) result to receive further testing from a trained provider using a validated national testing algorithm. HIV self-testing approaches range from unassisted self-testing (with limited or no instruction provided) to directly assisted self-testing (where a testing provider demonstrates how to use the self-test kit). Self-test kits can be distributed in various ways (i.e., by providers or outreach workers, over the counter, etc.). Secondary distribution of HIV self-test kits may also occur (e.g., to partners of ANC attendees, or clients of FSWs). Data for the numerator should be generated by counting the number of individual HIV self-test kits distributed and NOT the number of individuals receiving an HIV self-test kit. Data is captured and reported at the lowest distribution point. This is to prevent double counting between the various higher supply chain levels.
Disaggregation	**Type of self-testing:** Directly assisted and Unassisted Number of Test kits distributed by **Age/Sex** ■ Total Number of clients reported having reactive self-test result by Age/Sex ■ Total Number of clients reported having reactive result and confirmed to conventional HIV testing service (HTS) using the national algorithm Age/Sex
Sources	Self-Test Register (KP Register)/HTS Logbook
Reporting level	HP/HC/Clinics/Hospital
Reporting frequency	Monthly

5. Proportion of STI cases tested for HIV

Definition	Proportion of STI cases tested for HIV in the reporting period.	
Formula	Number of STI cases tested for HIV in the reporting period Total number of STI cases in the reporting period	X 100
Interpretation	This indicator is intended to provide information on the proportion of STI cases that are tested for HIV. It is helpful to measure the magnitude of the HIV and STI co-infection and to intensify the HIV prevention interventions. It also helps to track the number of STI cases. Additionally, the proportion of STI cases detected can be tracked by dividing the number of detected STI cases by the estimated number of STI cases in the catchment area.	
Disaggregation	HIV test result (Positive/Negative) by Age/Sex: <15M/F, >15 M/F By syndrome type/Age /Sex: <15M/F,>15 M/F	
Sources	PICT Tally, OPD and IPD registers	
Reporting level	Heath center /Clinic/ Hospital	
Reporting frequency	Monthly	

6. Number of newly identified HIV positive adults and children clients linked to treatment and care

Definition	Number of adults and children linked to care and treatment
Formula	Number of clients linked to care and treatment in the reporting period
Interpretation	Programmatically very important to monitor the status of newly identified HIV positives clients before initiate ART. In addition, helps to track variation between newly identified positive and those who started treatment in a specified period.
Disaggregation	**By Age/Sex** **Pregnancy Status:** pregnant, non-pregnant
Sources	Positive tracking Register
Reporting level	Heath center /Clinic/ Hospital
Reporting frequency	Monthly

7. Percentage of people living with HIV receiving ART

Definition	Percentage of adults and children currently receiving antiretroviral therapy (ART)	
Formula	Number of adults & children receiving ART at the end of the reporting period	X 100
	Estimated number of people living with HIV	
Interpretation	This indicator measures the ongoing scale-up and uptake of ART and retention in ART programs as a critical step in HIV service provision and assesses progress towards coverage of ART. It also measures the progress towards providing antiretroviral therapy to all people living with HIV and the extent to which ART needs are met. Provision of Antiretroviral therapy has been shown to reduce HIV-related morbidity and mortality among those living with HIV, and onward HIV transmission. This indicator measures the 2nd 95 target. Data for this indicator is generated by counting the number of adults and children who are currently receiving ART in accordance with the nationally approved treatment protocol at the end of the reporting period. Patients who have died, stopped treatment, transferred out, lost (patient not seen for 1 to 3 months from last visit) and dropped out (patient not seen for > 3 months from last visit) are NOT counted. Patients on ART who initiated or transferred in during the reporting period should be counted. Some people pick up several months of antiretroviral medicines (ARVs) at one visit, and efforts should be made to include these people in the numerator as receiving antiretroviral even if they do not attend the clinic in the last month of the reporting period. As it will be difficult to get the PLHIV estimate or the expected number of individuals who know their status at the Zone/woreda and lower levels, this indicator will be calculated at these levels based on the target allocation during the planning phase. This indicator includes currently receiving ART clients at ART clinic and those currently receiving ART at PMTCT clinic. All PMTCT only sites are expected to report ART currently receiving clients on monthly basis.	
Disaggregation	**Age/Sex by Regimen:** **ARV Dispensing Quantity by Months of dispensing Age/Sex:** ■ <3 months of ARVs (not MMD) dispensed to patient by: <15 F/M, 15+ F/M, ■ 3-5 months of ARVs dispensed to patient by: <15 F/M, 15+ F/M, ■ 6+ months ARVs dispensed to patient by: <15 F/M, 15+ F/M, **Pregnancy Status: pregnant, non-pregnant**	
Sources	ART Register, PMTCT register, ART regimen tally, EMR-ART Software	
Reporting level	Heath center /Clinic/ Hospital	
Reporting frequency	Monthly	

8. Number of adults and children with HIV infection newly started on ART

Definition	Number of adults and children newly enrolled on antiretroviral therapy (ART) in the reporting period
Formula	Number of adults and children newly enrolled on antiretroviral therapy (ART) in the reporting period
Interpretation	The indicator measures the ongoing scale-up and up-take of ART program This measure is critical to monitor along with number of patients currently on ART in relation to the number of PLHIV that are estimated to be eligible for treatment to assess progress in the program's response to the epidemic in specific geographic areas and population as well as at the national level. This indicator includes newly initiated clients at ART clinic and those newly started ART at PMTCT clinic. All PMTCT only sites are expected to report ART new initiation on monthly basis.
Disaggregation	**Age/Sex by Regimen** **Pregnancy Status:** pregnant, non-pregnant
Sources	ART Register, PMTCT register, ART regimen tally, EMR-ART Software
Reporting level	Heath center /Clinic/ Hospital
Reporting frequency	Monthly

9. ART retention rate

Definition	Percentage of adults and children known to be on treatment 12 months after initiation of antiretroviral therapy (net current cohort)	
Formula	Number of adults and children who are still on treatment at 12months after initiating ART	X 100
	Total number of adults and children who started ART in the 12 months prior to the beginning of the reporting period	
Interpretation	This indicator measures the proportion of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy and it is one important measure of program success and is a proxy for overall quality of program. **The Numerator:** Number of adults and children still alive and on ART at 12 months after initiating treatment. A 12-month outcome is defined as the outcome (i.e. whether the patient is still alive and on ART, dead or lost to follow-up) 12 months after starting. The numerator does not require patients to have been on ART continuously for the 12-month period. Patients may be included in the numerator (and denominator) if they have missed an appointment or drug pick-up or temporarily stopped treatment during the 12 months since initiating treatment, as long as they are recorded as still being on treatment at month 12. On the contrary, those patients who have died, stopped treatment, or been lost to follow-up as of 12 months since starting treatment are not included in the numerator. The number of adults and children on ART at 12 months includes patients who have transferred in (and their initiation date is known) at any point from initiation of treatment to the end of the 12-month period and excludes patients who have transferred out during this same period to reflect the net current cohort at each facility. **The Denominator:** Number of adults and children in the ART start-up groups initiating ART at 12 months prior to the end of the reporting period (The denominator is the total number of adults and children in the (monthly) ART start-up groups who initiated ART at a point 12 months prior to the beginning of the reporting period, regardless of their 12-month outcome. This includes all patients, both those on ART as well as those who are dead, have stopped treatment or are lost to follow-up at month 12. Again, the denominator includes patients that have transferred in (and their initiation date is known) and excludes patients that transferred out during the time period. The net current cohort is the number of patients in the start-up group plus any transfers in, minus any transfers out.	
Disaggregation	**Age/Sex by Regimen** **Pregnancy Status:** pregnant, non-pregnant	
Sources	ART Register, PMTCT register, ART regimen tally, EMR-ART Software	
Reporting level	Heath center /Clinic/ Hospital	
Reporting frequency	Monthly	

10. Number of ART Clients Interrupted Treatment

Definition	Number of ART patients (who were on ART in the previous reporting month) and then had no clinical contact for greater than 28 days since their last expected contact
Formula	Number of ART patients (currently on ART) with no clinical contact or ARV pick-up for greater than 28 days since their last expected clinical contact or ARV pick-up
Interpretation	This indicator is intended to: (1) help better understand fluctuations or steady growth in Currently on Treatment over time, (2) encourage tracing of patients when a patient has had no clinical contact for greater than 28 days since their last expected contact and (3) promote timely identification of patient outcomes among patients known to have missed clinical visits or drug pickups. Serious and repeated attempts should be made to reengage any such patients and return them to treatment. In case of death, mortality data should be analyzed and investigated to determine causes of death, where possible.
Disaggregation	Outcome by Age/Sex Died by Age/Sex Lost after on Treatment for <3 months by Age/Sex Lost after on Treatment for >3 months by Transferred Out by Age/Sex Refused (Stopped) Treatment by Age/Sex
Sources	ART Register, PMTCT register, ART regimen tally, EMR-ART Software
Reporting level	Heath center /Clinic/ Hospital
Reporting frequency	Monthly

11. Proportion of PLHIV currently on Differentiated Service Delivery Model (DSD)

Definition	Total number of eligible/stable Adults on 1st line regimen currently on DSD in the reporting period	
Formula	Total Number of Clients on DSD	X 100
	Total number of eligible/stable Adults on 1st line regimen	
Interpretation	Important for service follow up and to show the performance of differentiated HIV Service Delivery	
Disaggregation	Age/Sex: <15M/F,>15 M/F By different models: ASM, FTAR, CAG, PCAD	
Sources	DSD Register and Tally Sheets	
Reporting level	Heath center /Clinic/ Hospital	
Reporting frequency	Monthly	

12. Viral load suppression

Definition	Percentage of patients on ART with a suppressed viral load (<50 copies/ml) in the past 12 months	
Formula	Number of ART patients with suppressed VL results (<50 copies/ml) documented within the past 12 months	X 100
	Number of ART patients with a VL test result documented within the past 12 months	
Interpretation	This indicator could provide information that can contribute to quality improvement activities designed to maximize rates of viral suppression in patients on ART and prevent the acquisition of HIV drug resistance. The viral load of patients receiving ART provides an indication of adherence to treatment, patient compliance with disease monitoring and the quality of care delivered. Measuring viral suppression is a key programmatic indicator related to effective treatment. It helps as a proxy indicator to monitor the third 95 of UNAIDS' 95-95-95 treatment target, that 95% of people receiving ART will have viral suppression by 2030. For the numerator: It is the actual number of PLHIV on ART that have a document suppressed VL result at the end of the reporting period. It is expected that viral load testing should be routine rather than episodic. If there is more than one VL result for a patient during the past 12 months, the most recent result should be reported. For the denominator: It is the actual number of PLHIV on ART that have documented VL test. Only patients who have been on ART for at least 3 months should be considered. Note: Viral load tests for PMTCT clients should also be included in this indicator.	
Disaggregation	By Age/Sex By Pregnancy status: non-pregnant and pregnant or breastfeeding	
Sources	ART and PMTCT registers	
Reporting level	Heath center /Clinic/ Hospital	
Reporting frequency	Monthly	

13. Proportion of clinically undernourished People Living with HIV (PLHIV) who received therapeutic or supplementary food

Definition	The proportion of individuals receiving therapeutic or supplementary food among those whose nutritional status was assessed and found to be undernourished	
Formula	No. of clinically undernourished PLHIV on ART who received therapeutic or supplementary food	X 100
	No. of PLHIV on ART who were nutritionally assessed & found to be clinically undernourished.	
Interpretation	Provision of nutritional treatment, care and support for those undernourished PLHIVs is important to prevent morbidity and mortality. Under nutrition significantly increases mortality risk for HIV-infected individuals regardless of treatment status. Among the clinically undernourished PLHIVs, those with severely undernourished (SAM) cases will receive the Ready-To-Use Therapeutic Food (RUTF) and those with moderately undernourished (MAM) cases receive Ready-To-Supplementary Food (RUSF) based on availability of supplies. **Severe Acute Malnutrition (SAM):** Adult: -BMI less than 16 kg/m2. Pregnant and lactating: -MUAC less than 19 cm Children: -under 5: MUAC <11cm or WFH (weight for height) <70% or median <- 3 Z score, 5-18 years of age: BMI -for-Age <-3 z-score **Moderate Acute Malnutrition (MAM):** Adult: BMI 16-18.49 kg/m2 Pregnant and lactating: MUAC 19-23 cm Children: -under 5: MUAC 11cm to <12cm or WFH (weight for height/ length) <-3 Z or ≥ 70% to < 80% median or ≥ -3 Z to < -2 Z score 5-18 years of age: BMI-for-Age between -2 and -3 z-score **Normal/No Under nutrition:** Adult: BMI >18.5, or MUAC >23cm, Children: WHZ >-2 or WHM>80%, MUAC ≥ 12 cm, BMI for Age: 5-18 years >-2 Z- score.	
Disaggregation	Nutritional Status (MAM and SAM) by Age / Sex Pregnancy status: Non-pregnant and Pregnant,	
Sources	ART Register, PMTCT register, ART regimen tally, EMR-ART Software	
Reporting level	Heath center /Clinic/ Hospital	
Reporting frequency	Monthly	

14. Percentage of non-pregnant reproductive age women living with HIV on ART using a modern family planning method

Definition	Percentage of non-pregnant women living with HIV on ART using a modern family planning method	
Formula	Number of non-pregnant women on ART aged 15-49 Years reporting the use of any method of modern family planning	X 100
	Total number of non-pregnant women on ART aged 15-49 Years	
Interpretation	This indicator will be used to monitor HIV/FP integration at ART sites. This indicator is a subset of contraceptive prevalence rate but focuses specifically on HIV-infected women to measure progress in prong 2 ("prevent unwanted pregnancies among women living with HIV") of the four prongs of PMTCT. Preventing unintended pregnancies in women living with HIV is a critical step towards reducing mother-to-child transmission and is a core component of the international standards for a comprehensive approach to PMTCT. Inherent within this indicator is the principle that integrated HIV/FP program activities must respect a client's right to make informed decisions about her reproductive life. This means that clients should have access to an appropriate and comprehensive range of contraceptive options; and/or to safer conception/pregnancy counseling depending upon their fertility desire and intentions. All non-pregnant PLHIV women on ART reporting the use of modern contraceptive irrespective of where the service provided will be reported as using modern family planning method. All non-pregnant PLHIV women on ART reporting the use of modern contraceptive irrespective of where the service provided will be reported as using modern family planning method.	
Disaggregation	**Age** **Method:** Injectable, Implant, IUD, Other methods	
Sources	ART Follow-up form, ART Registers and EMR-ART	
Reporting level	Heath center /Clinic/ Hospital	
Reporting frequency	Monthly	

15. Proportion of patients enrolled in HIV care who were screened for TB

Definition	The proportion of patients on ART who were screened for TB during the reporting period	
Formula	Number of patients on ART whose TB status was assessed during the reporting period	X 100
	Total number of eligible patients on ART who had visit during the reporting period	
Interpretation	PLHIV enrolled in HIV care includes all those continuing in care and those newly enrolled during the reporting period. The numerator is taken from ART registers by counting the number of patients whose TB status was assessed during the reporting period. Any patient who started on ART during the reporting period should be counted in the ART register. The denominator is those currently on ART during the reporting period. It is taken from ART registers by counting the number of patients with a visit during the reporting period. This indicator is intended to provide information on the proportion of HIV positive patients in HIV care and treatment who are screened for TB at the last visit. It measures the burden of known TB co-morbidity among people in HIV care. It might be used in drug supply planning for ART drug substitution in people treated for TB. An increase in this indicator suggests that a higher proportion of HIV patients are being screened for TB and other increased efforts such as: developing a standard screening algorithm, training HIV staff, revising cards/ registers, etc. A decrease in this indicator suggests that a lower proportion of PLHIV are being screened for TB and alert the program to make the appropriate decision to improve the service.	
Disaggregation	Age/Sex: <15M/F, 15+ M/F Start of ART by Screen Result: ■ New on ART/Screen Positive ■ Previously on ART/Screen Positive	
Sources	ART Follow-Up form, ART Registers and EMR-ART	
Reporting level	Heath center /Clinic/ Hospital	
Reporting frequency	Monthly	

16. Proportion of ART patients who started on a standard course of TB Preventive Treatment (TPT)

Definition	Proportion of ART patients who started on a standard course of TB Preventive Treatment (TPT) in the reporting period	
Formula	Total number of adults and children previously enrolled in HIV care who start (are given at least one dose of) TPT during the reporting period. Total number of eligible adults and children previously enrolled in HIV care during the reporting period	X 100
Interpretation	All clients eligible for TPT in the previous reporting period should be initiated on treatment.. It helps to determine TPT consumption /uptake /Backlog clearance of TPT among patients previously enrolled on ART and in filling gaps in determining national TPT coverage.	
Disaggregation	TPT Status by Age, Sex and Type of Prophylaxis: ■ TPT Started in the reporting period INH<15 F/M, 15+ F/M 3HP<15 F/M, 15+ F/M ■ Enrolment status ■ Among New on ART ■ Among Currently on ART	
Sources	ART Register, Follow-Up form, individual record form, EMR-ART	
Reporting level	Heath center /Clinic/ Hospital	
Reporting frequency	Monthly	

17. Proportion of ART patients who completed Standard Course of TB Preventive Treatment (TPT)

Definition	Proportion of ART patients who started on a standard course of TB Preventive Treatment (TPT) in the previous reporting period and completed therapy	
Formula	Number of patients completed TPT in the reporting period Number of ART patients initiated on any course of TPT during the previous reporting period	X 100
Interpretation	This indicator measures the performance of HIV programs in scaling up TPT, with the goal of preventing progression to active TB disease among PLHIV and decreasing ongoing TB transmission in this population. ART patients should be monitored for proper completion and the effectiveness of the TPT initiative in the HIV/AIDS program. As part of a cascade from treatment current to TB screening, this indicator will inform programs on the pace of scale-up, and the proportion will allow for monitoring of cohorts through completion of therapy. **The numerator** is generated by counting the number of PLHIV on ART from the previous reporting period who were documented as having received at least six months of IPT or having completed any other standard course of TPT (such as 3-HP). **The denominator** is generated by counting the total number of patients who were started on ART who were started on any course of TPT during the reporting period prior to the one being reported.	
Disaggregation	TPT Status by Age, Sex and Type of Prophylaxis: ■ TPT Started in the reporting period ■ INH<15 F/M, 15+ F/M ■ 3HP<15 F/M, 15+ F/M a. TPT Completed in the current reporting period ■ INH<15 F/M, 15+ F/M ■ 3HP<15 F/M, 15+ F/M	
Sources	ART Register, Follow-Up form, EMR-ART	
Reporting level	Heath center /Clinic/ Hospital	
Reporting frequency	Monthly	

18. Proportion of HIV positive women (15+) on ART screened for Cervical Cancer

Definition	Proportion of HIV- positive women on ART screened for Cervical Cancer during the reporting period	
Formula	Number of HIV-positive women on ART screened for Cervical cancer during the reporting Period	X 100
	Total Number of women (15+) on ART Eligible for cervical cancer screening during the reporting Period	
Interpretation	This indicator is vital for understanding and estimating the demand for screening services and forecasting and planning for the resources required to meet that demand and the resulting treatment needs. Disaggregation enhances sensitivity of this indicator in order to help identify the need for further outreach, as well as trigger further situational investigation at lower levels of the health system. Cervical Cancer screening and treatment should be analyzed together at the woreda or sub-regional level that includes sites where both screening and treatment would occur, in order to monitor the percentage of positive women who receive treatment while accounting for patient referrals between facilities. The term "Eligible" in the denominator refers to those HIV-positive women – only women being screened for the first time in their lifetime or re-screened after 2 years negative cervical cancer screening test result or post-treatment follow-up screening. For Visual inspection of cervix with acetic acid (VIA) the benchmark of 5%-25% screen-positivity for women (aged 30-60) screened for the first time should be used when monitoring performance.	
Disaggregation	Screening Visit Type and Result by Age: 1st time screened (Negative, Positive, Suspected Cancer) by age 45-49, 50+, Unknown Age ■ Re-screened after previous negative (Negative, Positive, Suspected Cancer) by age ■ Post-treatment follow-up (Negative, Positive, Suspected Cancer) by age	
Sources	Follow-Up form, Cervical Cancer Screening and Treatment Register, EMR-ART	
Reporting level	Heath center /Clinic/ Hospital	
Reporting frequency	Monthly	

19. Proportion of women (15+) on ART Cervical Cancer screen – positive who received Treatment

Definition	Proportion of cervical cancer screen-positive women who are HIV-positive and on ART eligible and who received cryotherapy, thermocoagulation or LEEP during the reporting period	
Formula	Number of HIV-positive women on ART cervical cancer screen-positive who received treatment during the reporting period	X 100
	Total 15+ women on ART who are cervical cancer screen positive during the reporting period	
Interpretation	This indicator is vital to capture the number of individual HIV-positive women on ART who required and received treatment for precancerous cervical lesions. Cervical cancer screening and treatment should be analyzed together at the woreda or sub-regional level that includes sites where both screening and treatment would occur, in order to monitor the percentage of positive women who receive treatment while accounting for patient referrals between facilities. The globally accepted benchmark of at least 90% eligible for treatment of precancerous lesions receiving treatment should be used when monitoring performance.	
Disaggregation	Screening Visit Type and Treatment Type by Age:	
Sources	Follow-Up form, Cervical Ca Screening individual record form, EMR-ART	
Reporting level	Heath center /Clinic/ Hospital	
Reporting frequency	Monthly	

20. Proportion of PLHIV on ART Screened for Viral Hepatitis

Definition	Proportion of PLHIV on ART screened for Viral Hepatitis during the reporting period	
Formula	Number of PLHIV on ART screened for Viral Hepatitis during the reporting period	X 100
	Total Number of PLHIV on ART eligible for Viral Hepatitis screening during the reporting period	
Interpretation	PLHIVs are among high-risk groups for hepatitis infection. Higher prevalence of hepatitis infection is reported among HIV co infected individuals. This indicator measures the burden of Hepatitis infection among PLHIV. It also helps to generate data to enhance the compelling efforts in awareness creation and promotion of safer sex as part of the overall national HIV prevention and control efforts. It also helps to understand and estimating demand for hepatitis screening services, forecasting, and planning for the resources required to meet that demand and the resulting treatment needs. Screening and treatment should be analyzed at woreda /zonal or regional levels which includes sites where both screening and Treatment would occur. It also helps to assess Progress in implementing the health sector response to viral hepatitis. Eligibility and frequency of screening could be determined based on the national strategy for prevention and control of Viral hepatitis.	
Disaggregation	**Status of Test result by Age/Sex:** Pos _HBV: <15 M/F >=15 M/F Pos_HCV, <15 M/F >=15 M/F Neg: <15 M/F,>=15 M/F	
Sources	Hepatitis Testing and Treatment Register	
Reporting level	Heath center /Clinic/ Hospital	
Reporting frequency	Monthly	

21. Proportion of PLHIVs diagnosed with Hepatitis infection who received treatment

Definition	Proportion of PLHIV screened and diagnosed with Hepatitis B and C infection who received treatment in the reporting period	
Formula	Number of hepatitis screen - positive PLHIV on ART who received Treatment in the reporting period	X 100
	Total Number of hepatitis screen –positive PLHIV on ART in the reporting period	
Interpretation	PLHIVs are among high risk groups for hepatitis infection. Higher prevalence of hepatitis infection is reported among HIV-coinfected individuals. This indicator helps to monitor whether PLHIV requiring (eligible for) treatment for hepatitis B and C infection received treatment. It helps to assess Progress in implementing the health sector response to viral hepatitis	
Disaggregation	**Status of Test result by Age/Sex:** Pos _HBV: <15 M/F >=15 M/F Pos_HCV , <15 M/F >=15 M/F Neg: <15 M/F ,>=15 M/F	
Sources	Comprehensive Lab Register (Serology) and Treatment Register	
Reporting level	Heath center /Clinic/ Hospital	
Reporting frequency	Monthly	

22. Percentage of Key and Priority Population (KPP) members reached with HIV defined packages of services who were linked to HTS providing facilities

Definition	Percentage KPP members reached with HIV defined packages of services who were linked to HTS providing facilities	
Formula	Number of KPP members who were linked to HTS providing facilities	X 100
	Number of KPP members reached with HIV prevention defined packages of services	
Interpretation	This indicator can be used as a proxy for the quality of community-based HIV prevention services. It is critical to determine the proportion of KPP members reached with defined HIV prevention packages who are linked for HTS service as these are hard to reach population who can mostly be accessed through their peer service providers. The denominator should be the sum of: 1 KPP members reached with defined HIV prevention packages through peer service providers 2) KPP members reached with defined HIV prevention packages through facility-based modalities (e.g. KPP friendly clinics) 3) KPP members reached with defined HIV prevention packages through other community-based service provision modalities including DICs, CSOs The numerator should be the number of KPP reached with the HIV prevention packages and linked to HTS providing facilities. Please refer to key and Priority Populations HIV prevention Minimum Service Package (FHAPCO, January 2019). Limitation of this indicator: data incompleteness might be a problem because it is collected from multiple sources.	
Disaggregation	By Population groups: FSWs, PWID, Prisoners, High risk AGYW, Long distance drivers, Workers in hot spot areas, Widowed and Divorced men and women and partners of PLHIV	
Sources	Community HIV prevention SBCC Register	
Reporting level	Community based services providers/ WoHO	
Reporting frequency	Monthly	

23. Percentage of KPPs tested HIV positive at community programs who were linked to care and treatment

Definition	Percentage of KPPs tested HIV positive at community programs who were linked to care and treatment	
Formula	Number of identified HIV positive KPP members linked to care and treatment during the reporting period	X 100
	Number of KPP members tested HIV positive at community programs during the reporting period	
Interpretation	This indicator can be used as a proxy for the quality of community-based HIV prevention services. It is critical to determine the proportion HIV positive KPP members identified positives at community level who are linked to care and treatment to be enrolled in ART. Limitation of this indicator: data incompleteness might be a problem because it is collected from multiple sources.	
Disaggregation	By Population groups: FSWs, PWID, Prisoners, High risk AGYW, Long distance drivers, Workers in hot spot areas, Widowed and Divorced men and women and partners of PLHIV	
Sources	Community HIV Testing Register	
Reporting level	Community based services providers/ WoHO	
Reporting frequency	Monthly	

8.3. Data reporting, data flow and quality assurance

Routine HIV HMIS data are assembled and reported on a monthly, quarterly and annual basis. Facilities aggregate and review their data monthly and report to their respective facility and administrative offices quarterly. The administrative office aggregates the data it receives, adds its own administrative figures, and monitors its own performance based on these reports and self-generated data. It then forwards the DHIS-2 report to the next level. Annual reports include additional data that are not collected quarterly. These reports follow the same line and principles of disaggregation as the quarterly reports. Data aggregation methodology is maintained throughout the reporting chain so that it is possible to disaggregate data by facility type and ownership even at the federal level. DHIS-2 Data flow from the facilities to the federal level is depicted below.

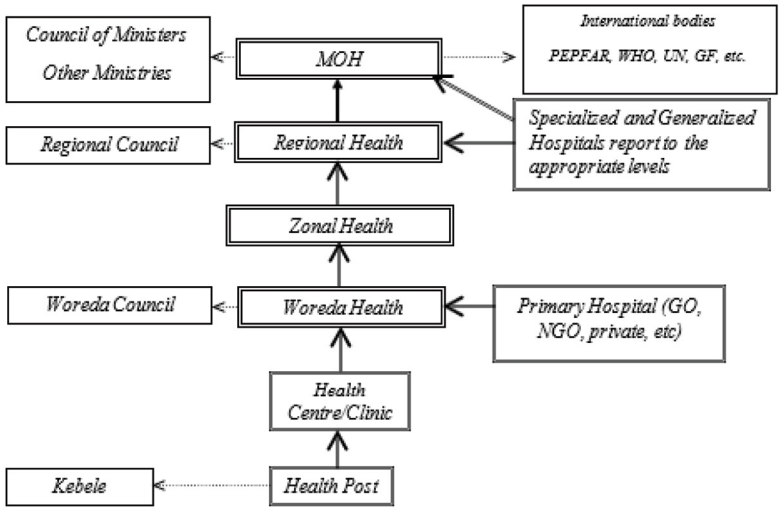

Figure 8.1 HMIS data flow and feedback loop

8.3.1. Data quality assurance

Data quality check is one of the components of the M&E system. Once data are collected, the data are checked for any inaccuracies and obvious errors at every level. The data quality assurance (DQA) is done at two levels: facility level and administrative level (district health offices). At facility level, such a mechanism is the Lot Quality Assurance Sampling (LQAS) methodology which is done on monthly basis. In this procedure randomly selected data elements from the monthly reports are checked against the register or source of the report. The findings are then compared to a standard Data Accuracy Table. The same procedure is done at district health offices on quarterly basis before the data are sent to the next higher reporting unit. Hence, in HMIS all reports are quality checked at every level, from the healthcare institution to the federal level.

8.4. HIV/AIDS Program Monitoring

8.4.1. Supportive Supervision

Supervision aims at ensuring and improving quality, effectiveness and efficiency of services provided; it should also enhance competence and satisfaction of the staff at all levels. Supervision consists of observation, discussion, support and guidance. Since it is an essential tool in the management of staff and facilities, it should be done on a regular basis. The overall aim of supervision is the promotion of continuous improvement in the performance of the staff.

Supervisions at all levels are conducted in an integrated manner using standardized checklist clearly identified in the Integrated Supportive Supervision (ISS) guideline. It is done from every administrative level to the respective office and health facility. The ISS guideline shows the actual process of implementation, team composition and checklist.

Besides ISS, in-depth HIV program-specific supervisions using standardized HIV and TB/HIV supportive supervision tool can also be conducted whenever critical gaps that require intensive technical approach are identified during the ISS.

8.4.2. Program Performance Review

Review meetings organized at various levels create a very good opportunity to review the status of program implementation, achievements and challenges and come up with workable solutions for the problems and challenges encountered. They are key elements for program management. Furthermore, review meetings are forums for exchange of ideas and experiences among the health professionals and program coordinators. In these meetings, program coordinators from the next lower levels will present activity reports of their respective area, including major achievements and challenges or constraints encountered during the period under review. Integrated review meeting is conducted on regular bases at every level. In this manner, activities taking place at all levels will then be brought forward to the respective review meeting sessions where HIV and TB/HIV program performance is reviewed as part of the overall review meeting.

8.5. Other Monitoring Considerations

Programs are increasingly moving beyond coverage indicators to focus on critical outcomes, such as viral load suppression and immune reconstitution, and on the broader impact of HIV treatment, including HIV-related mortality and HIV incidence. However, programs also need to measure potential unintended outcomes, such as HIV drug resistance and ARV-related toxicities. Periodic evaluations and implementation research are also central to reviewing programs.

Evaluation, including impact and program performance, and implementation research

Routine monitoring should be complemented by systematic evaluations and program reviews to assess the performance and effects of HIV programs, either comprehensively or with respect to specific priority areas. Social science and implementation research are important to assess perceptions and values of service recipients and communities along with barriers, facilitators and experiences in delivering and receiving services. Impact indicators, such as incidence, morbidity and mortality, are often difficult to measure.

Mathematical modeling is often undertaken to project various scenarios for program planning and evaluating impact. Ensuring the availability of robust data is especially important when estimating the prevention impact of ARV drugs at the population level, as multiple sources of information and uncertainty come into play. Specific data collection efforts and models for particular contexts may provide more accurate estimates.

8.6. Recording and reporting Tools in HIV/ AIDS Program

Different tools are used for routine recording and reporting of HIV /AIDS Program. List of recording reporting tools used includes : HTS Logbook ,PrEP register, PEP register , VCT register ,HIV Self-test Register , OPD /IPD registers , Positive Tracking Register , PMTCT register , ART register ,EMR-for ART , Follow-up forms , DSD Register, VL Register , Cervical Cancer Screening and Treatment Register, Hepatitis Screening and Treatment Register and Tally sheets(PITC/VCT/ICT/DSD/Clinical Care) .