Working Document on Monitoring and Evaluating of National ART Programmes in the Rapid Scale-up to 3 by 5

Introduction

Currently, five to six million people infected with HIV in the developing world need access to antiretroviral (ARV) therapy to survive. Only 400,000 have this access. The failure to deliver ARVs to the millions of people who need them is a global health emergency. To address this emergency, WHO is fully committed to achieving the "3 by 5 " target – getting three million people on ARVs by the end of 2005. This is a means to achieving the treatment goal: universal access to ARVS for all who need them. WHO will lead the effort, with UNAIDS and other partners, using its skills and experience in coordinating global responses to diseases such as the effective and rapid control of SARS.

The monitoring and evaluation (M&E) of the 3 by 5 initiative is a high priority. It will be crucial to know how countries are meeting the agreed goals and objectives and how local levels (districts, Regions or Provinces) are monitoring progress and identifying any problems they may encounter. The need for a substantial amount of country input and ownership of the process will require a refinement of the M&E strategy in close consultation with countries. However, key components of the M&E strategy can be developed now, with further refinements and developments to come later.

Disclaimer

This document is a work in progress. It represents the best effort to describe a coherent approach to the monitoring and evaluation of scaling up to the reach the goal of 3 by 5 that is possible at this time. This working document is best viewed as a step in a process that will include field testing, the gathering of additional experience, additional review, the validation of indicators presented and subsequently refinement. If inadequacies are found in this working document, they are mostly the result of incomplete information and experience on which to base decisions. That will be corrected as experience mounts.

International Standards

The first element of the M&E strategy for 3 by 5 that can and must be developed is for the national level. To accomplish this, two documents have been developed with international partners describing the exact methods, tools and intervals for collecting key indicators of progress towards the goal of 3 x 5:

- ***Working Document on Monitoring and Evaluating of National ART Programmes in the Rapid Scale-up to 3 by 5;*** and
- ***HIV Drug Resistance Surveillance Guidelines***.

These documents are an initial attempt to describe what is needed for the monitoring and evaluation of two very complicated and very new areas and respond to countries' requests for guidance. Further refinements are anticipated as experience with scaling up and with the use of these documents develops.

Why national level indicators?

National level indicators are important because they allow countries to assess national progress toward the stated goal of 3 by 5. They also allow cross national comparisons and

global assessment of progress in meeting the 3 by 5 goal. Cross national comparisons are instructive in that they can identify countries where progress toward meeting the 3 by 5 goal may be lagging behind. A more detailed analysis of monitoring data below the national level can then be undertaken to identify areas where performance can be improved.

Data used for national level indicators are generated at the local level and passed up through the system. Not all indicators needed or of use at the local level are relevant at the national level, however; some issues are best measured at the local level and may lose their meaning when abstracted to the national level. Nonetheless, it is important to keep in mind that all of the information for the indicators presented here will be gathered at the local level and that some of these national level indicators may actually be interpretable and useful at the local level as well.

Why is its important to monitor and evaluate at the national level programmes scaling up access to antiretroviral drugs?

Programmes for increased access to antiretroviral drugs are eliciting increased commitment and support. Many countries are expanding their programmes to respond to the growing HIV/AIDS pandemic and the increased support becoming available. These programmes are naturally expensive and represent a serious commitment of funds and energy in the countries involved. The need for setting standards for monitoring and evaluation of these programmes at the national level and assuring that these investments are yielding the maximum benefit is clear.

National monitoring and evaluation of programmes for increased access to antiretroviral drugs should allow programmes to monitor their progress in implementation, identify problems, refine and adapt their implementation strategies; assess the effectiveness and impact of their interventions; and test strategies for optimizing their effectiveness, impact, cost-effectiveness and sustainability.

For whom is this manual intended?

This document is intended for use at the national level, by programme managers. It may also be useful for programme managers or programme planners for developing indicators for use at more local levels as well.

What does this manual cover?

This manual provides guidance on monitoring and evaluation of national programmes for the scaling up of access to antiretroviral treatment for people with HIV/AIDS. It complements existing M & E guides, including the guidelines on monitoring the Declaration of Commitment of HIV/AIDS (UNAIDS), which included an indicator on antiretroviral treatment for people with advanced HIV infection. It is principally aimed at national programme managers. Its purpose is to determine the level of success of programmes for the provision of antiretroviral treatment for people with advanced HIV infection, to identify areas where further support is required and to inform adaptation and scaling up strategies.

The manual presents a list of core and additional indicators. The core indicators are indicators that all countries with programmes for scaling up access to antiretroviral drugs for people with advanced HIV infection should aim to cover (at a minimum). Countries are also encouraged to cover additional indicators, provided they have the need and the resources to do so. For each indicator the manual provides: (a) guidance on its definition; (b) rationale for its use and what it measures; (c) how to measure it and measurement tools; and (d) strengths and limitations. In proposing indicators, the document takes into account existing indicators, experiences and standards to the extent possible, and attempts to present already-existing

indicators for which experience exists or indicators that will not require special data collection efforts. When this is not possible, new indicators are proposed, along with new tools for their use. For the most part, these are restricted to the "additional" indicators, not part of the core indicators recommended for all countries

The indicators presented in this document are for use at the national level, as is the case with the UNAIDS and partners' "National AIDS Programmes: A Guide to Monitoring and Evaluation" (2000) and the additional monitoring and evaluation guides recently produced to complement it.

Key lessons learned to succeed with national indicators

WHO has developed extensive experience in developing international guides and in supporting countries in setting up Logistics, Health and Management Information Systems (LHMIS). In the process, a number of key lessons have been learned:

- First, the **number of indicators** must be kept to a minimum, as the effort and expense required to collect the necessary data can be daunting, especially for national M&E systems with limited capacity.

- Secondly, the indicators developed must be **agreed by international and national partners** to minimize the burden countries may encounter through having to collect different indicators, or different variations of the same indicator, for international agencies and donors who fail to co-ordinate their own M & E needs.

- Thirdly, indicators that can be compiled using **data collection systems that already exist** are preferable to those that will require special efforts to collect.

These principles have guided the process of developing this document as well. However, the emergency nature of the scale up to 3 by 5 and the lack of experience with large scale ART access and use have made it difficult to comply with these principles to the same degree as has been the case with previous guides.

Subsequent efforts, in close collaboration with the countries to capture the specific and more detailed features of the programme efforts in the 3 by 5 initiative and the delivery of ART, are crucial and will be considered in a second stage.

Overall measurement of progress toward 3 by 5 at a glance

All national programmes should be able to demonstrate progress in their contribution to achieving 3 by 5 by tracking and reporting the following national level indicators. These indicators can be phased in over time, with some being crucial for the emergency phase, but others of greater importance subsequently. The indicators are sorted into the components of a programme they monitor (first column), the general topic covered (second column) and the title of the indicator (third column).

Level	Area	Indicator
Input	National policy & guidelines	Core 1: Existence of national policy and guidelines for ART programs
Process	Human resources	Core 2: Number of health personnel trained to deliver ART services according to national/international

		standards per 1,000 people in need of treatment

	Drug supply	*Core 3: Percentage of ARV distribution nodes that report on inventory consumption, quality, losses and adjustments on a monthly basis* (under development)
Output	Coverage of programme and access	Core 4: Percentage of districts with at least one center that provides ART services in-line with national standards*
		Core 5: Percentage of designated facilities providing ART in-line with national standards
Outcome	People on treatment	Core 6: Percentage of people with advanced HIV infection receiving ARV combination therapy
		Core 7: Number of drug regimens distributed to patients per month
		Core 8: 12 Month programme retention rate
Impact	Health status / Survival	Core 9: Percentage of adults on treatment who gain weight by at least 10% at 6 months after the initiation of treatment
		Core 10: Percentage of people still alive at 6, 12, and 24 months after initiation of treatment.

* Only in generalized epidemics and in development phase of programs

Recommended phasing of the indicators

While all these indicators are seen as important in the long term, their implementation can take some time. For countries which have more limited capacity or which may choose to stagger the implementation of the M & E, the indicators have been divided into two groups: those which are crucial to monitor during the emergency phase and those which can be implemented subsequently.

In the emergency phase of the 3 by 5 scale up, the following indicators are felt to be particularly relevant or important:

	Indicator	*Method*
Input	Core 1: Existence of national policy, guidelines, and target for ART programs	Rapid Assessment
Process	Core 2: Number of health personnel trained to deliver ART services according to national or international standards	ART program statistics
Outputs	Core 4: Percentage of districts with at least one center that provides ART services in-line with national standards	ART program monitoring
Outcomes	Core 6: Percentage of people with advanced HIV receiving ART	Facility records and national estimates of need
Impact	Core 10:Percentage of people still alive at 6, 12 and 24 months after initiation of treatment	Patient registers

During the post emergency phase, the following indicators should be added:

	Indicator	Method
Process	*Core 3: Percentage of ARV distribution nodes that report on inventory consumption, quality, losses, and adjustments on a monthly basis**	LMIS
Outputs	*Core 5: Percentage of designated facilities providing ART in-line with national standards*	ART program monitoring
	*Total number of persons tested, by age and sex**	Facility reports
	*Proportion of tests that are positive**	Facility reports
Outcomes	*Core 7: Number of drug regimes distributed*	Pharmaceutical records
	*ARV resistance containment***	
	Core 8: Number of people that pick up drugs (monthly)	LMIS
Impact	*Core 9: Percentage of adults on treatment who gain weight by at least 10% at 6 months after initiation of treatment***	Patient records
	*Proportional increase in the mean CD4 cell counts of people on treatment after 6, 12, 24 months****	Patient records

* not presented in this document or under development

Some of these core indicators are newly developed; others are similar to indicators that have been used for several years and can also be found in other M&E guides.

Additional indicators are also provided, and these should only be collected by countries experiencing specific epidemic types, and if resources allow.

For all indicators, a definition, including the specification of numerators and denominators (where appropriate) is provided. Additionally, specifications on what indicators measure, how to measure them and their strengths and limitations are given

Core Indicator 1: Existence of national policy and guidelines for ART programs Core indicator for all epidemic types	
Definition:	Existence of national guidelines (either approved or in draft form) for the provision of treatment with antiretroviral drugs in-line with international or commonly agreed upon standards. Guidelines should be available for all aspects of the provision of ART, including the four S's (starting, stopping, switching and substituting) as well as the provision of necessary care, support and follow-up. In some countries, each of these issues may be addressed as part of comprehensive national HIV/AIDS guidelines, in others, individual guidelines on ART exclusively may be available.

Rationale and what it measures:	*Rationale:* National guidelines and policies are commonly based on existing international standards, or on those standards that are generally agreed upon but not yet formally presented as international guidance. Without guidelines, services of unknown quality and impact can be implemented on an ad hoc basis, making it difficult to monitor and evaluate efforts. *What it measures:* This indicator identifies whether or not guidelines that are in line with international, or commonly agreed upon standards exist and are in use in the country.
What do guidelines for the provision of ART include?	In order to be truly effective, guidelines should initially specify how programs should be developed in order to meet each country's ART needs. This includes outlining how to develop appropriate objectives and targets. More specific guidelines on starting patients on ART; guidelines on monitoring of patients on on-going ART; guidelines on when to switch patients to other regimens; guidelines on counselling of patients on ART about prevention of infection through sexual activity should also be developed. Whatever components of treatment are ultimately adopted, countries should adapt their guidelines to be relevant for their particular situation.
Measurement tools and how to measure it:	A survey among key informants at the national level or at health care facilities is used to determine whether or not they exist and are used. Key informants in this situation at the national level are persons responsible for HIV/AIDS; at the health facility level they include practitioners and clinic directors. When asking if such guidelines and policies exist, the following additional questions may be asked if time and resources allow: ▪ How were these policies and guidelines formulated? (Explore the process: by whom and based on what) ▪ Are these policies and guidelines nationally accepted (even if only draft versions are available)? ▪ To what extent are they implemented? (Explore the extent of implementation as well as barriers and opportunities that were/are being faced in implementation) ▪ How often are these updated? (Explore the process: how often and by whom). This indicator should be measured every year until policies and guidelines are found to exist and used.
Strengths and limitations:	It should be noted that this indicator does not attempt to address the quality of the policies or guidelines nor of their implementation. The indicator also does not capture new developments in the field. The initial focus is on determining whether or not policies and guidelines exist, but once they are in place the indicator should be changed to measure how often these are updated. Generally, policies and guidelines require critical review and updating every 2-3 years. This is particularly true in the field of ART, where new advances are continuously being made.

Core Indicator 2: Number of health personnel trained to deliver ART services according to national or international standards Core process indicator for all countries.	
Definition:	The number and percentage of health personnel newly trained or re-trained to deliver ART according to national guidelines during the preceding 12 months. These guidelines should cover ART dispensing, administration, and monitoring. "Re-trained health personnel" refers to those that have undergone in-service training. That is, they are already in the work force and have been practising for several years. Training includes both in-service and pre-service training.
Numerator:	Number of health care personnel newly trained or re-trained in ART provision, administration, and monitoring during the preceding 12 months.
Denominator:	Total number of health care personnel (physicians, nurses, health agents) working in facilities that provide ARTs.
Rationale and what it measures:	*Rationale:* The resources available to address health needs are important to assess in order to inform planning and mark progress towards the goals of "3 by 5". Prior to implementation or to expansion of services, it is vital to know not only the facilities and equipment that are available, but the training and human resources as well. Only in this way can health systems hope to provide services that meet the needs of and are acceptable to the population. *What it measures:* This indicator quantifies the human resources that are trained in the dispensing, administration, and monitoring of ART and who are available to provide the required services.
Measurement tools and how to measure it:	A review of training records, where available, in each facility that has implemented AIDS treatment, including ART can be used to calculate the numerator. In some countries, a national, provincial or district training coordinator keeps records of which staff have been trained in what subjects. When this exists, it could be used instead of a facility survey. Where these records do not exist, a survey of facilities can be carried out. A random sample of health care personnel in these facilities is asked about any training they have received in the dispensing, administration, and monitoring of ART. Interviewers should explore what training included (this will vary depending on the type of site). The minimum package for each type of facility is outlined in the indicator's definition. The numerator for this indicator should be collected every six months in the initial two years of the "3 by 5" initiative. The denominator, if based on facility survey, is more expensive but necessary for the calculation of the percentage. This should be collected every two years. After the initial data

	collection it may be of interest to disaggregate data for those health care personnel that are newly trained or re-trained during the preceding 12 months as well as to maintain a record of how many health care personnel have been trained since the first time this indicator was measured. The denominator, the number of health personnel trained they have received in the dispensing, administration, and monitoring of ART will need to be calculated based on the existing number of health care personnel working at sites where people requiring ART receive services. These numbers can be obtained from ministry and health facility records.
Strengths and limitations:	This indicator is useful in that it tracks the number of health workers trained to provide ART and treatment for AIDS over time. The indicator attempts to document increasing capacity to deliver treatment interventions. However, no conclusion should be drawn regarding quality as it is the practices that generally inform this, not the existence of trained personnel. In addition, not all countries should be expected to have all, or a high percentage of all possible, health workers trained. Rather, this indicator needs to be interpreted in light of the size and nature of the epidemic a country is facing. Additional problems that may be faced include difficulties in determining the denominator, as some countries may have limited information regarding the existing pool of human resources available in different facilities. In addition, frequent transfers of personnel between facilities, or high rates of attrition, may complicate the interpretation of this indicator. This indicator also only expects that formal (paid, either with money or in-kind) health workers will be counted, where in many settings informal health workers also contribute significantly.

Core Indicator 3: Percentage of ARV distribution nodes that report on inventory consumption, quality, losses and adjustments on a monthly basis (Still under development) *Core process indicator for all countries.*	
Definition:	*The percentage of ARV distribution "nodes" that report basic information on the logistics management system on a monthly basis. The information of importance is inventory consumption per month, quality and any problems with quality, losses from inventory stores, and adjustments made on a monthly basis.* *A "node" is a regionally or locally based distribution point, receiving its drugs from the central stores and providing them to the clinics, pharmacies and other recognized distribution points in the district. These nodes are the key to maintaining an uninterrupted drug supply that is secure, flexible and responsive to changing needs.*
Numerator:	*Number of nodes reporting on monthly basis.*
Denominator:	*Total number of nodes*
Rationale and what it measures:	*Rationale: This indicator measures how the information needed to guide and maintain a well functioning ART supply programme is collected and used to make strategic decisions. Only by continually monitoring the inventory and distribution of ARTs, accounting for any loss and registering supply for first versus second line drugs can an ART programme hope to remain current and maintain control of these scarce and expensive drugs.* *What it measures: This indicator measures the frequency of collection and reporting of key information for logistics management, specifically inventory consumption per month, quality and any problems with quality of inventory, losses from inventory stores, and adjustments made on a monthly basis*
Measurement tools and how to measure it:	*Nodes can be identified through a review of the drug delivery system. Each point at which drugs are received for distribution at the district level should be included in the denominator. For countries where drugs are directly dispensed from a central unit to distribution points (health facilities, pharmacies, etc.)the only node(s) to include would be those at the central level.* *The denominator of this indicator is the number of nodes that report monthly.*

Core Indicator 4: Percentage of districts or local health administration units with at least one center that provides ART services in-line with national standards Core indicator for generalised epidemics	
Definition:	Percent of districts or local health administration units that have at least one centre staffed by trained counsellors providing ART in-line with national standards.
Rationale and what it measures:	*Rationale:* This indicator gives a crude idea of coverage of ART. *What it measures:* This is another measure of coverage and equity in generalised epidemics.
Measurement tools and how to measure it:	A list should be constructed of all facilities offering ART. Key informants maybe used to identify such locations, although most countries will most likely have a listing already. *The indicator is the percentage of all districts in the country with at least one facility meeting the criteria. Since districts (or similar administrative units) are usually defined in relation to their population size, weighting of the indicator is considered unnecessary. This indicator should be measured every year until full geographical coverage is found to exist.*
Strengths and limitations:	It is most useful in tracking changes over time as a national programme attempts to scale service provision up to meet need in generalised epidemic. Once coverage has reached a certain level, following the start-up phase, it is unlikely to fall again and the indicator becomes obsolete. A major limitation of the indicator is that does not take into account the scale of the epidemic (and therefore the scale of potential need for ART).

Core Indicator 5: Percentage of designated facilities providing ART in-line with national standards Core indicator for all epidemics	
Definition:	The percentage of designated health care facilities at different levels of the health care system that have the capacity to provide ART in-line with national standards.
Rationale and what it measures:	*Rationale:* In the recent years, tertiary level institutions have started providing ART in line with national standards. The program components should reflect country needs, but generally include: trained staff, uninterrupted drug supply, regular reporting in-line with national standards, ability to monitor patients, use of standard regimes (although in the public sector this may always be the case), and regular supervision. *What it measures:* Many countries have produced national guidelines to help guide service providers in the appropriate provision of ART in-line with national standards. These standards cut across at least 5 components (above), with an optional one more difficult to measure (supervision). With the scaling-up of efforts, attempts are being made to ensure that HIV-related conditions are dealt with at appropriate levels within the health system, with referrals in both directions when necessary. This indicator measures the extent to which health services have the capacity to meet treatment with the provision of ART of HIV-infected patients at appropriate levels of the health care system, according to national guidelines.
Measurement tools and how to measure it:	This indicator can be measured as proposed in the soon to be released ***National AIDS Programmes: A Guide to Monitoring and Evaluating HIV/AIDS Care and Support .*** Core indicator 7. *Percent of health facilities that have the capacity and conditions to provide advanced level HIV care and support services, including provision and monitoring of ART* a. Systems and items to support management of opportunistic infections and provision of palliative care (symptomatic treatment) for advanced care of clients with HIV/AIDS; b. Systems and items to support advanced services for HIV/AIDS care; c. Systems and items to support ART services; d. Conditions to provide advanced inpatient care for clients with HIV/AIDS; e. Conditions to support home care services; and f. Post-exposure prophylaxis. A health facility survey is required to measure the extent to which ART is being administered and monitored in line with existing standards.

Strengths and limitations:	This indicator is a compendium of many different aspects of care and service provision, all of which must score a minimum amount if the facility is to be included in the numerator of the indicator. Because services tend to improve unevenly, especially in resource constrained settings, the resulting indicator may remain low for some time. Disaggregation of the indicator will indicate the areas in which services have improved and those in which they continue to lag. The scoring of the components of the indicator will necessarily include a measure of subjectivity. This may influence comparisons between different countries, as well as trends over time if the monitoring team changes.

Core Indicator 6: Percentage of people with advanced HIV infection receiving antiretroviral combination therapy Core indicator for all epidemics	
Definition:	The percentage of people with advanced HIV infection who are currently receiving antiretroviral combination therapy.
Rationale and what it measures:	*Rationale:* To assess progress in providing antiretroviral combination therapy to all people with advanced HIV infection who would benefit from that treatment. *What it measures:* This indicator measures the extent to which those in need of ART are able to get it.
Measurement tools and how to measure it:	This indicator can be compiled from programme monitoring data. The number of people (i.e., adults and children) with advanced HIV infection who are currently receiving antiretroviral combination therapy can be calculated as follows: A. Number of people receiving treatment at the start of the year Plus B. Number of people who commenced treatment in the last 12 months Minus C. Number of people for whom treatment was terminated in the last 12 months (including those who died) For the purpose of this indicator, the number of people with advanced HIV infection is taken to be 15% of the total number of people currently infected. The latter is estimated using the most recent sentinel surveillance data. **Numerator**: Number of people with advanced HIV infection who receive antiretroviral combination therapy according to the nationally approved treatment protocol (or WHO/UNAIDS standards). **Denominator**: Number of people with known advanced HIV infection Private sector antiretroviral provision should be included in the calculation of the indicator wherever possible and the extent of such provision should be recorded separately. The start and end dates of the period for which antiretroviral combination therapy is given should be stated. Overlaps between reporting periods should be avoided whenever possible.

Strengths and limitations:	This is an UNGASS indicator. It permits monitoring of trends in coverage but does not attempt to distinguish between different forms of antiretroviral therapy, or to measure the cost, quality or effectiveness of the treatment provided. These will each vary within and between countries and are liable to change over time. The proportion of people with advanced stages of HIV infection will vary according to the stage of the HIV epidemic and the cumulative coverage and effectiveness of antiretroviral therapy among adults and children. The proportion of currently recommended for use in calculating this indicator (15%) is a crude estimate and may be subject to revision. This figure is particularly relevant in situations where the current coverage of antiretroviral combination therapy is low. The degree of utilization of antiretroviral combination therapy will depend on the cost relative to local incomes, service delivery infrastructure and quality, availability and uptake of VCT services, perceptions of effectiveness and possible side effects of treatment, etc. Preventive antiretroviral therapy for the purpose of prevention of MTCT or post-exposure prophylaxis are not included in this indicator.

Core Indicator 7: Number of drug regimens distributed to patients per month	
Definition:	Number of drug regimens distributed to patients per monthCore
Numerator:	Number of drug regimens distributed through drug distribution points
Denominator:	Not applicable
Rationale and what it measures:	This indicator tracks on a monthly basis the number of drug packets (combination therapy packs) distributed to patients through pharmacies.
Measurement tools and how to measure it:	This indicator is measured through the records of pharmacies.
Strengths and limitations:	This indicator is a direct measure of the distribution of drug packets. It does not account for which regimen was distributed nor for the quality of the treatment, the adherence or many other important factors. However, in the scaling up of access to treatment, this simple indicator is an important marker of progress.

Core Indicator 8: 12 month programme retention rate	
Definition:	Percentage of individuals still on treatment 12 months (and every 12 months thereafter) after initiating treatment.
Numerator:	Number of individuals who picked up their ART treatment 12 months (and every 12 months thereafter) after initiating it
Denominator:	Total number of individuals initiating treatment in a given calendar year.
Rationale and what it measures:	*Rationale*: One of the goals of any ART programme should be to provide treatment for life to those people entering the treatment programme. Defining a 12 month programme retention rate target could be used to improve programme performance *What it measures*: This indicator measures the efficiency with which an ART programme is delivered in a given site, district or (national) programme (depending on the level at which the data are aggregated). Well run programmes in Africa have 12 month programme retention rates of 70 to 90%. 12 month programme retention rates of less than 70% would identify the need for urgent corrective action
Measurement tools and how to measure it:	This indicator is measured through patient registry.
Strengths and limitations:	The strength of this indicator is the prompt feedback it provides on programme efficiency. In addition to the national level, it is also useful at the programme level. The limitation is that it will not give any indication why patients have dropped out of the programme, such as death, discontinuation because of financial reasons, out of own choice, adverse events attributed to treatment, out migration, or perceived or real treatment failure. The quality of this indicator will depend on the quality of the patient registry in place.

Core indicator 9: Weight gain Core impact indicator for all epidemic types	
Definition	Percentage of adults on treatment who gain weight by at least 10% at 6 months after the initiation of treatment.
Rationale and what it measures:	*Rationale:* Among adults, weight loss is one of the most common symptoms in late-stage HIV-infection. Weight loss and gain are easy to measure in any setting, and this type of information is routinely collected during patient follow-up visits. The high prevalence of weight loss among patients in late-stage HIV-infection and the ease of data collection therefore make weight gain a good proxy for successful treatment. This indicator can therefore be used to measure the impact of an ART program. *What it measures:* The indicator measures how many adults with late-stage HIV-infection have gained weight as a result of ART.
Numerator:	Number of adults on ART who gained weight by at least 10% at 6 months after initiating treatment.
Denominator:	The total number of adults who initiated treatment at around the same time.
Measurement tools and how to measure it:	Patient registers can be used to identify a cohort of patients who initiated treatment at around the same time. *"At around the same time" can be defined as those patients initiating treatment within 3 weeks of each other.* These patients make up the denominator. At their 6 month patient check-up, the patients within this cohort would be weighed and those that are found to have gained 10% of baseline weight would become the numerator.
Strengths and limitations:	The indicator's strength lies in the ease of data collection as weight monitoring is part of most routine patient check-ups. The largest limitations to this indicator are its assumptions that: (1) patients will be initiated on ART during late-stage HIV-infection and (2) that all adults in late-stage HIV-infection will experience weight loss. As access increases and individuals seek out care at an earlier stage in their infection, a new indicator will need to be developed in order to compensate for the lack of weight loss experiences among asymptomatic, or early-stage HIV-infection.

Core indicator 10: Survival Core impact indicator for all countries	
Definition:	Percentage of people still alive at 6, 12, and 24 months after initiation of treatment.
Numerator:	Number of individuals still alive after initiating treatment after 6, 12, and 24 months.
Denominator:	Total number of individuals initiating treatment at around the same time.
Rationale and what it measures:	*Rationale:* One of the goals of any ART program should be to increase survival among infected individuals. *What it measures:* This indicator measures the degree to which treatment can prolong a person's life by assessing how many individuals survived after 6, 12, and 24 months of receiving treatment.
Measurement tools and how to measure it:	Information on survival beyond specific points in time can be collected in patient registers. This indicator will require that a cohort of patients be followed up.
Strengths and limitations:	The strengths of this indicator lay in the ease of data collection as any ART program should monitor patients on treatment and determine the number of individuals who survive beyond specific periods in time. For some patients, follow-up information may not be available as a result of migration, complete treatment failure, or even death. Programs may deal with this loss by including only those individuals for which they have full information in the numerator and denominator.

Additional indicators still under development for this document

Additional Indicator 1:	Number of health care personnel people trained according to national or international standards to support individuals on treatment.
Additional Indicator 2	Ratio of first line to second line treatment regimens distributed.
Additional Indicator 3	Proportional increase in mean CD4 cell counts of people on treatment after 6, 12, 24 months.

Additional indicators under development for other guides

Testing and counselling guide	Total number of persons tested, by age and sex
Testing and counselling guide	Proportion of tests that are positive
Antiretroviral resistance	ARV resistance surveillance