



# MONITORING AND EVALUATION TOOLKIT

## HIV/AIDS, TUBERCULOSIS AND MALARIA

Second Edition  
January 2006

## Monitoring and Evaluation Toolkit: HIV/AIDS, Tuberculosis, and Malaria

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# Table of Contents

<b>I.</b>	<b>How to use the M&amp;E Toolkit .....</b>	<b>5</b>
	Why this toolkit? .....	5
	Who is it for?.....	5
	What are its contents? .....	5
	How do you use this toolkit? .....	6
	How was the toolkit developed?.....	6
	Recent update.....	6
<b>II.</b>	<b>Basic elements of M&amp;E .....</b>	<b>8</b>
<b>III.</b>	<b>General concepts in M&amp;E.....</b>	<b>11</b>
	Methods of data collection.....	12
	Technical Assistance .....	14
<b>IV.</b>	<b>Frequently-asked questions .....</b>	<b>15</b>
	Operational Questions .....	15
	Common questions on the toolkit and Global Fund reporting .....	17
<b>V.</b>	<b>Component-specific reporting framework.....</b>	<b>24</b>
<b>VI.</b>	<b>HIV/AIDS .....</b>	<b>25</b>
	Table of Selected Programmatic Indicators for HIV/AIDS .....	27
	Table of Selected HIV /AIDS Impact and Outcome Indicators .....	30
	General resources .....	33
	Technical assistance .....	33
	Guidelines and references .....	34
<b>VII.</b>	<b>Tuberculosis (TB) .....</b>	<b>36</b>
	Table of Selected Programmatic Indicators for Tuberculosis.....	37
	Table of Selected TB Impact and Outcome Indicators.....	39
	General resources .....	39
	Technical assistance .....	40
	Guidelines and references .....	40
<b>VIII.</b>	<b>TB/HIV .....</b>	<b>42</b>
	General resources .....	42
	Technical assistance .....	42
	Guidelines and references .....	42
<b>IX</b>	<b>Malaria .....</b>	<b>44</b>
	Table of Selected Programmatic Indicators for Malaria.....	45
	Table of Examples of Selected Malaria Impact and Outcome Indicators .....	46
	General resources .....	49
	Technical assistance .....	49
	Guidelines and references .....	50
<b>X.</b>	<b>Health Systems Strengthening .....</b>	<b>52</b>
	Table of Selected Indicators for Health Systems Strengthening.....	54
	General resources .....	55
	Technical assistance .....	55
	Guidelines and references .....	55

## List of terms and abbreviations used

<b>AIS</b>	AIDS Indicator Survey
<b>ARV</b>	Antiretroviral therapy
<b>BSS</b>	Behavioral surveillance survey
<b>CBO</b>	Community Based Organisations
<b>CDC</b>	Centers for Disease Control and Prevention, DHSS (USA)
<b>CPT</b>	Co-trimoxazole prophylactic treatment
<b>CSW</b>	Commercial sex worker
<b>CTBC</b>	Community tuberculosis care
<b>DHS</b>	Demographic health survey
<b>DOTS</b>	The internationally recommended strategy for TB control
<b>GFATM</b>	Global Fund to Fight AIDS, Tuberculosis and Malaria
<b>HBC</b>	High-burden country (used in reference to tuberculosis disease burden)
<b>H(M)IS</b>	Health (Management) Information System
<b>IDU</b>	Injecting drug user
<b>IEC</b>	Information, education, communication
<b>IPT</b>	Intermittent preventive treatment
<b>IRS</b>	Indoor residual spraying
<b>ITN</b>	Insecticide-treated (bed) net
<b>KAP</b>	Knowledge, Attitude and Practice
<b>LLIN</b>	Long-lasting insecticide treated net
<b>M&amp;E</b>	Monitoring and evaluation
<b>MARP</b>	Most-at-risk population (female sex workers, clients of female sex workers, injecting drug users and men who have sex with men)
<b>MDG</b>	Millennium Development Goal
<b>MDR-TB</b>	Multidrug-resistant tuberculosis
<b>METAT</b>	Monitoring and Evaluation Technical Assistance and Training
<b>MICS</b>	Multiple Indicator Cluster Surveys
<b>MIS</b>	Malaria Indicator Survey
<b>MSM</b>	Men who have sex with men
<b>NAC</b>	National AIDS Council
<b>NGO</b>	Non-governmental organization
<b>NTP</b>	National Tuberculosis Program
<b>OGAC</b>	The President's Emergency Plan for AIDS Relief: Office of the Global AIDS Coordinator
<b>OVC</b>	Orphans and vulnerable children
<b>PEPFAR</b>	President's Emergency Plan for AIDS Relief (USA)
<b>PLWHA</b>	People living with HIV/AIDS
<b>PMTCT</b>	Prevention of Mother-to-Child Transmission (of HIV)
<b>PPM</b>	Public-private mix
<b>RBM</b>	Roll Back Malaria
<b>SDA</b>	Service delivery area
<b>SSA</b>	Sub-Saharan Africa
<b>STB</b>	StopTB (Tuberculosis)
<b>STI</b>	Sexually transmitted infections
<b>SW</b>	Sex Workers
<b>TB</b>	Tuberculosis
<b>UNGASS</b>	UN General Assembly Special Session
<b>UNDP</b>	United Nations Development Programme

# I. How to use the M&E Toolkit

## Why this toolkit?

With the global momentum to scale up the response to the three main infectious diseases, HIV/AIDS, tuberculosis (TB) and malaria, public health practitioners need to provide various levels of accountability for their activities to several constituencies. It is becoming increasingly important for countries to be able to report accurate, timely and comparable data to national authorities and donors in order to secure continued funding for expanding health programs. Most importantly, they need to be able to utilize this information locally to strengthen evolving programs. It is particularly important for national program implementers and managers to have access to the quality information they need to make adjustments and programmatic and technical decisions.

Existing M&E guidelines and materials have been developed through the collaborative work of many partnership constituents, such as UNAIDS, WHO, UNICEF, the President's Emergency Plan for AIDS Relief: Office of the Global AIDS Coordinator (OGAC), USAID and HHS/CDC, other bilateral agencies, non-governmental organizations (NGOs) including MEASURE Evaluation and Family Health International (FHI), and global disease partnerships such as HIV/AIDS 3 by 5 Initiative, Stop TB and Roll Back Malaria. In addition, country M&E officers have been deployed by many agencies, for example UNAIDS and the Emergency Plan. They have an important role to work with country M&E systems to harmonize reporting around common measures and ensure different stakeholders coordinate closely to develop M&E systems.

Developed with the support of international technical agencies and M&E experts, the purpose of the M&E Toolkit is to gather a selection of standard indicators and provide users with references to key materials and resources.

The M&E Toolkit aims to assist countries in achieving the following:

- Coordinate reporting in line with international partners and national systems, thereby encouraging the use of existing, widely agreed and accurate measures
- Select simple indicators, measure, report, and use good quality health and health-related information in a manner that meets both donor and country needs
- Clearly define the standard services that are delivered by a program, and establish both routine and longer term measures of progress
- Formulate a participatory national M&E strategy by providing an overview of key issues to consider
- Evaluate, review and improve M&E systems over time as the scale up of interventions to prevent and reduce morbidity and mortality associated with HIV/AIDS, TB and malaria occurs

The M&E Toolkit focuses mainly on the routine high level reporting of a restricted set of measures of progress (**programmatic and outcome/impact indicators**). Indicators for “supportive environments” are presented in an attempt to address each disease within a broader context. However, most indicators are focused on the health sector.

## Who is it for?

This information package aims to provide those working at the country level on M&E systems linked to expanded HIV/AIDS, TB and/or malaria programs with rapid access to key resources and standard guidelines. Users include national disease program managers and project leaders, donor agencies, technical and implementing agencies and NGOs so as to better harmonize information demands. While the guide is written with this specific audience in mind, it does not intend to exclude the wider cadre of individuals and groups working in these disease areas including, for example, professionals working in education, gender issues, and legal reform.

## What are its contents?

The M&E Toolkit is meant to provide a framework in which to present a selection of standard and essential indicators in the areas of HIV/AIDS, TB, and malaria:

1. General M&E concepts, guidelines, and responses to frequently asked questions are outlined in the first part of the document.

2. The second half of the toolkit is divided into disease-specific sections, with summary tables of selected programmatic indicators organized by service delivery areas. Outcome and impact measures are also shown in a second summary table and approaches to measurement are presented. Further resources and links to more specialized indicator manuals related to that disease are discussed in each section.
3. The Annexes to the M&E toolkit provide an overview of indicator definitions, measurement, and reporting.

## How do you use this toolkit?

The indicators presented have been developed for reporting at the national level, although many of them can also be used at various levels. National level users should design or modify their health information collection system keeping in mind that different types of data need to be collected for use at each level.

Users should aim to simplify their monitoring and evaluation and reporting, and aim to report internationally only a restricted set of indicators. The M&E Toolkit is not meant to contain a comprehensive list of indicators, but rather is limited to a selection of standard indicators that are likely to be part of routine data collection in disease programs, and useful for international reporting. As noted above, this toolkit is a work in progress, and modifications will be made periodically to assure that user needs are met and technical developments incorporated.

## How was the toolkit developed?

The M&E Toolkit is the outcome of a collaborative process of international partners, bilateral agencies and NGOs. Harmonization and wider partner buy-in is seen as important for coordination of reporting from international to national and local levels, particularly as resources for these activities are frequently limited. The toolkit aims to encourage the use of common measures in order to minimize parallel reporting systems.

The indicators in this toolkit were selected in consultation with technical M&E experts in each of the three diseases and with donors such as the Global Fund. Consultations were held with staff from the HIV/AIDS, TB, and malaria departments at WHO. Additionally, inputs from other members of the UN (particularly from UNAIDS and UNICEF) as well as the World Bank, Measure Evaluation and the Emergency Plan: OGAC, USAID, and the HHS/CDC were sought in order to ensure that the recommended indicators were in-line with those used across organizations. It is important to note that generally no new indicators have been developed for the purposes of this toolkit, but rather, existing indicators which are already being used are presented. This toolkit therefore builds upon already existing and accepted indicators used in a wide range of programs.

To make specific suggestions regarding improvements to the toolkit, users are encouraged to write to: [toolkit@who.int](mailto:toolkit@who.int)

## Recent update

This new edition of the M&E Toolkit is ***not*** a new reporting framework but rather a fine tuning and enhancement of the previous M&E Toolkit.

The toolkit uses the same measurement framework as developed in the first edition of the toolkit. M&E reporting based on the first edition can continue to be used (and results reported, for example to the Global Fund). This update represents developments in M&E which may improve measurement.

New technologies and developments have resulted in the need to revise and update the indicators presented in the first edition (published in June 2004). This updated edition of the toolkit has been revised according to the latest technical resources of the three diseases. Resources relating to impact and measurement approaches have been expanded, based on feedback from users. Since it is recognized that the three diseases are classified by different indicators, and that the aim is to provide a common framework, both versions of the toolkit attempt to move closer to an internationally agreed upon M&E system of indicators. The toolkit includes the following updates:

- Refinement and update of indicators and service delivery areas for the three diseases.
- Expansion of impact measures for the three diseases (which was limited in the first toolkit).
- Collaborative HIV/TB activities incorporated into HIV and TB components.
- Inclusion of a transversal “Health Systems Strengthening” section and relevant service delivery areas and indicators. Health System Strengthening service delivery areas and indicators can be included in each disease component. The details and rules for each round of Global Fund funding should be consulted to assess the best strategy.



- Additional information on data collection methods and evaluation (including measuring quality, limited in the first toolkit).
- Additional information on the M&E toolkit and Global Fund reporting, including the “top 10” indicators for Global Fund programmatic and outcome/impact reporting.

The Monitoring and Evaluation Toolkit is available electronically at <http://www.theglobalfund.org> .

## II. Basic Elements of M&E

### Establishing and strengthening a M&E program

While significant progress has been made in country M&E, much disease-specific M&E has been done in a vertical, isolated fashion that is often not linked or triangulated with other sources. Extensive evaluation of a donor-sponsored project may have been carried out in an important area of programming, without the results ever being shared in the field. In short, the utility of much of the disease-related measurement efforts in a country may be lost because there is often no coherent M&E system for users that can capture information on multiple diseases at different levels.

#### 1. Harmonizing country reporting, data standards and reporting systems

There is a danger that separate disease and donor driven M&E systems do not have common data standards, compatible IT systems or reporting platforms. Coordination of the overall M&E system across country and donor requirements (e.g. the Emergency Plan, the Global Fund and World Bank) is an important first step in building a common M&E system which can meet a variety of needs. In addition, many countries rely on surveys such as the Demographic and Health Surveys (DHS) or AIDS Indicator Surveys (AIS), Multiple Indicator Cluster Surveys (MICS) and/or Behavioral Surveillance Surveys (BSS) that are funded through external donors. This produces data that may be valuable in the broader M&E context, but may not be well integrated with traditional sources of health information, such as national health information and surveillance systems.

This toolkit aims to provide common indicators in support of implementing the “Three Ones” (described below). Although developed for AIDS, the principles have general relevance for M&E. By bringing together indicators for the three diseases, the aim is to extend the “Three Ones” beyond HIV to all three diseases.

#### The “Three Ones”

On 25 April 2004, the representatives of major donor organizations and of many developing countries adopted three principles as the overarching framework to better coordinate the scale-up of National AIDS Programs and related responses to the HIV/AIDS epidemic. The “Three Ones” are:

- **One** agreed HIV/AIDS *action framework* that provides the basis for coordinating the work of all partners;
- **One** national AIDS *coordinating authority*, with a broad-based multi-sector mandate; and
- **One** agreed-upon country-level *monitoring and evaluation system*.

The importance of creating, implementing and strengthening a unified and coherent M&E system at the country level cannot be overemphasized. A strong unified M&E system ensures that: 1) relevant, timely and accurate data are made available to national program leaders and managers at each level of the program and health care system; 2) selected quality data can be reported to national leaders; and 3) the national program is able to meet donor and international reporting requirements under a unified global effort to contain the HIV/AIDS pandemic.

A common, comprehensive and coherent M&E system has several advantages. It contributes to more efficient use of data and resources by ensuring, for example, that indicators and sampling methodologies are comparable over time and by reducing duplication of effort. As data collection resources are limited, this is an important asset as countries may pool donor funds in order to produce a limited number of large-scale, high quality studies rather than a myriad of ad hoc assessments that are not comparable. Data generated by a comprehensive M&E system ought to serve the needs of many constituents, including program or project managers, researchers and donors, eliminating the need for each to repeat baseline surveys or evaluation studies when they might easily use existing data. It is equally important that the basic data is made available as transparently as possible and placed in the public domain.

#### 2. What is the difference between national and sub-national M&E?

From the point of view of the national program, a coherent M&E system helps ensure that donor-funded M&E efforts best contribute to national needs. These needs go beyond disease-focused M&E, to strengthen the overall health information system. A further advantage is that it encourages coordination and communication between different groups involved in the national response to HIV/AIDS, TB, and malaria. These may include ministries working on social welfare or child welfare and the ministries of statistics and planning. Agreement among the major donor, technical and implementing agencies on the basic core M&E framework will reduce the burden of requests for data from different agencies.

Shared planning, execution, analysis and dissemination of data collection can reduce overlap in programming and increase cooperation between different groups, many of whom may work more efficiently together than in isolation.

In view of scarce M&E resources at sub-national level, emphasis is placed on monitoring program inputs and outputs and assessing whether or not implementation progresses according to a sub-national plan. A facility assessment as part of routine supervision serves to provide information on the quality of care or the availability and utilization of services. At all levels, both monitoring and evaluation are required.

Sub-national data is extremely relevant for national level M&E provided that national guidelines are followed to make aggregation possible. Information gathered from the sub-national level is helpful in guiding policy discussions and in validating results at higher levels. In some cases, data from the sub-national level provides a better indication of trends and issues of equity than from a country-level perspective.

Building or strengthening **Health Management Information Systems (HMIS)** is a pre-requisite for proper monitoring of the three diseases and the response to them. Increased funding in the three disease areas creates an opportunity to strengthen not only program or project specific health information, but also the health information and surveillance systems as a whole. HIV/AIDS, TB and malaria have different strengths related to data collection, dissemination, and use; opportunities exist for the three diseases to leverage each other's strengths.

An effective HMIS provides a solid basis for evaluations of large-scale programs, ultimately leading to improved planning and decision-making. Based on these findings, urgent decisions such as how to allocate new resources to achieve the best overall results will become easier to make.

### 3. What are the features of a good M&E system?

Countries have different M&E needs, dictated in part by the state of their HIV/AIDS, TB, and/or malaria disease burdens and country health structure. Yet successful M&E systems will share common elements, as demonstrated by successful programs in several countries. A list of some of these elements is given in Table 1.

**Table 1: Features of a good M&E system**

<b>M&amp;E UNIT</b>	<ul style="list-style-type: none"> <li>• An established M&amp;E unit within the Ministry of Health with designated technical and data management staff. This unit should, among other things, coordinate M&amp;E efforts across the three disease areas, irrespective of where individual disease-specific M&amp;E is managed, and be integrated within the broader statistical needs of the country.</li> <li>• Guidelines and guidance to sub national districts, regions and provinces for M&amp;E.</li> <li>• Guidelines for linking M&amp;E to other sectors such as education, labor, and military.</li> <li>• A budget for M&amp;E that is between five to ten percent of the combined national HIV/AIDS, TB, and malaria budgets from all sources. On average, seven percent should be used as the reference.</li> <li>• A significant national contribution to the national M&amp;E budget (not total reliance on external funding resources).</li> <li>• A formalized M&amp;E link, particularly with appropriate line Ministries, NGOs and donors, and national research institutions aimed at enhancing operations research efforts.</li> <li>• A multi-sectoral working group to provide input and achieve consensus on indicator selection and various aspects of M&amp;E design and implementation.</li> <li>• Expertise in the M&amp;E unit or affiliated with the unit to cover: epidemiology, behavioral/social science, data processing and statistical, data dissemination, resource tracking (both financial and commodity resources).</li> </ul>
<b>CLEAR GOALS</b>	<ul style="list-style-type: none"> <li>• Well-defined national program or project plans with clear goals, targets and operational plans. National M&amp;E plans should be revised every 3-5 years, and M&amp;E operational plans updated yearly.</li> <li>• Regular reviews/evaluations of the progress of the implementation of the national program or project plans against targets.</li> <li>• Coordination of national and donor M&amp;E needs.</li> </ul>
<b>INDICATORS</b>	<ul style="list-style-type: none"> <li>• A set of priority indicators and additional indicators at different levels of M&amp;E.</li> <li>• Consistent indicators that are comparable over time and with clear targets.</li> <li>• Selection of a number of key indicators that are comparable with other countries.</li> </ul>



<b>DATA COLLECTION &amp; ANALYSIS</b>	<ul style="list-style-type: none"> <li>• An overall national level data collection and analysis plan, including data quality assurance.</li> <li>• A plan to collect data and periodically analyze indicators and associated data sets at different jurisdictional levels of M&amp;E (including geographical).</li> <li>• Second generation surveillance, where behavioral data are linked to disease surveillance data.</li> </ul>
<b>DATA DISSEMINATION</b>	<ul style="list-style-type: none"> <li>• An overall national level data dissemination plan, with basic data sets freely and transparently available in a timely manner. Transparency is essential for real accountability.</li> <li>• A well-disseminated, informative annual report.</li> <li>• Annual meetings to disseminate and discuss M&amp;E and research findings with policy makers, planners and implementers.</li> <li>• A clearinghouse for generation and dissemination of findings.</li> <li>• A centralized database or library of all HIV/AIDS, TB, and malaria-related data collection, including ongoing research which is transparently and publicly available.</li> <li>• Coordination of national and donor M&amp;E dissemination needs.</li> </ul>
<b>SPECIAL STUDIES</b>	<ul style="list-style-type: none"> <li>• Select priority outcome/evaluation studies.</li> <li>• Include qualitative studies as needed.</li> <li>• Include operational research studies.</li> </ul>

#### 4. What is the difference between program and project M&E?

For the purposes of the Toolkit, *program* refers to an overarching national or sub-national response to the disease. Within a national program, there are typically a number of different areas of programming. For example, the HIV/AIDS program has a number of “sub-programs or projects” such as blood safety, sexually transmitted infection (STI) control, or HIV prevention for young people.

*Project* refers to a time-limited set of activities and objectives supported by resources that aim at a specific population defined geographically or otherwise. It should be noted that projects and programs can also be defined by timeframes – projects are usually short term where as programs are usually longer term in scope.

In view of its wider scope (thematic, geographic, target population), *program* monitoring tends to be more complex than *project* monitoring and therefore requires strong coordination among all implementing agencies. For impact and outcome evaluations to be conducted, the design of the program/project must include its own baseline and follow-up assessments measuring not only specific outcomes but also the level of exposure to the program/project and its activities.

# III. General concepts in M&E

## 1. What is the difference between monitoring and evaluation?

**Monitoring** is the *routine* tracking of the key elements of program/project performance (usually inputs and outputs) through record-keeping, regular reporting and surveillance systems, as well as health facility observation and surveys. Monitoring helps program or project managers determine which areas require greater effort and identify areas which might contribute to an improved response. In a well-designed monitoring and evaluation system, monitoring contributes greatly towards evaluation. Indicators selected for monitoring will be different, depending on the reporting level within the health system. It is very important to select a limited number of indicators that will actually be used by program implementers and managers. There is a tendency to collect information on many indicators and report this information to levels where it will not and cannot be used for effective decision-making. In addition, monitoring is used for measuring trends over time, thus the methods used need to be consistent and rigorous to ensure an appropriate comparison. More information is needed for project management than is needed at national or international levels. The number of indicators reported should decrease substantially from the sub-national to the national and international levels.

In contrast, **evaluation** is the *episodic* assessment of the change in targeted results related to the program or project intervention. In other words, evaluation attempts to *link* a particular output or outcome directly to an intervention after a period of time has passed. Evaluation thus helps program or project managers determine the value or worth of a specific program or project. Cost-effectiveness and cost-benefit evaluations are useful in determining the added value of a particular program or project. In addition, evaluation should also relate the outputs of a project/program to wider national trends in behavior and other outcomes, and the impact of diseases. This type of evaluation is important even if the project/program is only one part of a collective effort to impact the disease.

The objectives and the methodology used in monitoring and evaluation are different. In general, evaluations are more difficult in view of the methodological rigor needed: without such rigor, wrong conclusions on the value of a program or project can be drawn. They are also more costly, especially outcome and impact evaluations which often require population-based surveys or other rigorous research designs. However, evaluation should leverage data and surveys that are nationally available and regularly undertaken, e.g. DHS surveys, vital registration or sentinel site disease data.

## 2. Generalized Monitoring and Evaluation framework

There are varying frameworks applied to the selection of M&E indicators. Indicators are used at different levels to measure what goes into a program or project and what comes out of it. Over the past few years, one largely agreed upon framework has commonly been used, the input-process-output-outcome-impact framework. For a program or project to achieve its goals, **inputs** such as money and staff time must result in **outputs** such as new or improved services, trained staff, persons reached with services, etc. These outputs are the result of specific **processes**, such as training for staff, that should be included as key **activities** aimed at achieving the outputs. If these outputs are well designed and reach the populations for which they were intended, the program or project is likely to have positive short-term **effects** or **outcomes**, for example increased condom use with casual partners, increased use of insecticide-treated nets (ITNs), adherence to TB drugs, or later age at first sex among young people. These positive short-term outcomes should lead to changes in the longer-term **impact** of programs, measured in fewer new cases of HIV/AIDS, TB, or malaria and related burden of disease among those infected and affected (such as orphans and vulnerable children or widows). In the case of HIV, a desired impact among those infected includes quality of life and life expectancy. For additional information on M&E frameworks, readers can visit the following sites:

UNDP: [http://www.undp.org/gef/undp-gef\\_monitoring\\_evaluation](http://www.undp.org/gef/undp-gef_monitoring_evaluation)

MEASURE: <http://www.cpc.unc.edu/measure>

USG: <http://www.globalHIVevaluation.org>

UNAIDS: <http://www.unaids.org/en/default.asp>

Assessing the impact of a program requires extensive investment in monitoring and evaluation efforts, and it is often difficult to ascertain the extent to which individual programs, or individual program components, contribute to overall reduction in cases and increased survival. In order to establish a cause-effect relationship for a given intervention, studies with experimental or quasi-experimental designs may be necessary to demonstrate the impact. Monitoring of output or outcome indicators can also identify such relationships and give a general indication of programs progress according to agreed upon goals and targets. National surveys and datasets should also be leveraged in evaluation.

Different types of indicators are not equal but *linked* to each other to reach the intended goals and objectives of a specific program. Inputs such as money and staff time result in outputs such as delivery systems for drugs or other essential commodities, new or improved services, trained staff, informational materials, etc. If these outputs are well designed and reach the populations for which they were intended, the program is likely to have positive outcomes – depending on the context in which it operates. These positive outcomes should lead to changes in the longer-term impact of programs on target populations or systems.

The use of **standard indicators** provides the National Program with valuable measures of the same indicator in different populations, permitting analysis of trends (triangulation). This helps to direct resources to regions or sub-populations with greater needs and to identify areas for intensification or reduction of effort at the national level, ultimately improving the overall effectiveness of the national response. Over time, the use of standard indicators also ensures comparability of information across countries. When data from different sources are combined for analysis, this “triangulation” of data allows national, regional, or local evaluation of program efforts.

**A note on target populations and denominators:** In many cases, it may be difficult to determine the denominator, or population, to use when assessing, for example, coverage. We have therefore focused on **numerators**, or the subset of the population that is affected or benefits from interventions. Denominators should also be included where possible (if percentages are given, **numerators should also always be reported** to allow assessment of coverage over time and across populations). The publications *Estimating the Size of Populations at Risk for HIV (UNAIDS/IMPACT/FHI, 2002)* and *Guidelines for Sampling Orphans and other Vulnerable Children (UNICEF, 2003)*, as well as the *Guide to Monitoring and Evaluation National HIV Prevention Programs for Most-at-risk Population in Low Level and Concentrated Settings* (currently under review), may help readers in addressing the challenges faced in determining denominators when working with hidden populations or low and concentrated epidemics.

In this toolkit, the term target population refers to the group of people who are in need of an intervention. The target population can be the total population or a smaller, specific group such as young people. In designing interventions, efforts should be made to clearly define the target population. The description of services provided should specify which populations and geographic areas are covered. Definition of these is usually based on knowing whom diseases affect most, directly and indirectly. For example, the definition of a target population for HIV/AIDS interventions is often based on the epidemic state. In generalized epidemics where HIV prevalence is consistently over one per cent in pregnant women, the target population could very well be the general population. However, in concentrated and low-level epidemics where HIV prevalence is concentrated within groups with specific risk behaviors, the target group may be defined as a sub-group of the general population that shares these same behaviors – for example, men who have sex with men (MSM), people who use intravenous drugs (IDUs), or commercial sex workers (CSWs). For malaria in high endemic areas such as in Sub-Saharan Africa, important target groups are pregnant women and children under the age of five.

Finally, it is very important to **clearly define the services provided** to a population: these services are defined in terms of standard service delivery areas (SDAs) in this toolkit. The package of services needs to be specified carefully by target population group.

## Methods of data collection

Methods of data collection are provided in the disease specific sections, an overview is given here. The frequency of reporting will depend on the level of the indicators within the M&E conceptual framework – taking into account both a reasonable time-frame for an expected change and program capacity for M&E. It is particularly important to include routine data collection which is monitored regularly (quarterly, six months, annually) and plan at an early stage for longer term 1-3 year monitoring and evaluation surveys with clear baselines. The following reporting schedules are suggested:

**Table 2: Suggested reporting schedules**

Level of indicator	Recommended frequency of reporting	Examples of data collection methods used
<b>Input/Process</b>	Continuously	<ul style="list-style-type: none"> <li>• Health services statistics</li> <li>• Health facility surveys</li> <li>• Program monitoring</li> </ul>
<b>Output</b>	Quarterly, semi-annually, or annually	<ul style="list-style-type: none"> <li>• Health services statistics</li> <li>• Health facility surveys</li> <li>• Program monitoring</li> </ul>
<b>Outcome</b>	1 to 3 years	<ul style="list-style-type: none"> <li>• Population-based surveys</li> <li>• Health facility surveys</li> <li>• Special studies</li> </ul>
<b>Impact</b>	2 to 5 years	<ul style="list-style-type: none"> <li>• Surveillance</li> <li>• Population-based surveys</li> <li>• Special studies</li> </ul>

**Table 3: Measurement tools**

Measurement tools	Main characteristics	Examples of measurement methods used
<b>Health services statistics</b>	Routine data collection at health facilities. Program monitoring.	<ul style="list-style-type: none"> <li>• Data registered from various health facility registers</li> </ul>
<b>Health facility survey</b>	Survey targeting health facilities to gather information on the availability of human resources, equipment, commodities and drugs and the type of services delivered.	<ul style="list-style-type: none"> <li>• Site based facility surveys (e.g. HIV/AIDS Service Provision Assessment)</li> <li>• SAMS (Service Availability Mapping Surveys)</li> </ul>
<b>Qualitative methods</b>	Determine “what exists” and “why it exists” rather than “how much of it is there”. Through allowing the people to voice their opinions, views and experiences in the way they want, qualitative methods aim at understanding reality as it is defined by the group to be studied without imposing a pre/formulated questionnaire or structure (always developed by the researchers) on the population ( <i>Maier B. Gorgen, R et al 1995</i> ).	<ul style="list-style-type: none"> <li>• In-depth Interview (individuals, focus groups, key informants)</li> <li>• Direct observation</li> <li>• Interactive or projective technique (comments on posters, open-ended story/comment on story, role-play)</li> </ul>
<b>Operational research</b>	Operational research (OR), also called targeted evaluation, complements M&E systems. The main objective of OR is to provide program managers with the required information to develop, improve or scale-up programs. If evaluation focuses on whether a change in results can be attributed to a program, OR focuses on whether the program is the right, or best, program to achieve the desired results. It can be thought of as a practical, systematic process for identifying and solving program-related problems.	<ul style="list-style-type: none"> <li>• Examples of OR: <ul style="list-style-type: none"> <li>• Adherence</li> <li>• Equitable access</li> <li>• Costs</li> <li>• Linking prevention-treatment</li> <li>• Different models of intervention</li> </ul> </li> </ul>
<b>Sentinel site surveillance</b>	Collect prevalence information from populations that are more or less representative of the general population (such as pregnant women) or / as well as populations considered to be at high risk of infection and transmission. Can be linked or unlinked anonymous testing, with or without informed consent.	<ul style="list-style-type: none"> <li>• HIV sero surveillance in pregnant women or in identified groups at high risk</li> </ul>
<b>Population-based surveys</b>	A survey based on sampling of the target or general population, generally aiming to represent the characteristics, behaviors and practices of that population. It requires sufficient sample size to represent the larger population and to be analyzed in sub-groups, by age, sex, region and target populations.	<ul style="list-style-type: none"> <li>• MICS, DHS and DHS+, AIS, BSS, PLACE, SAWY</li> </ul>

Much of the information contained in this toolkit is centered on the collection of *quantitative* data. It is important to emphasize however, the value and use of *qualitative* data in complementing, validating and providing a richer understanding of quantitative findings. Although qualitative approaches are not intended to be generalized to broader populations, and cannot measure trends, such data does put quantitative data into context and allows for a more expansive interpretation of quantitative indicators. Qualitative data is also useful in addressing contextual responses to behavior change, information that can prove valuable in designing more effective communication campaigns, giving voice to the poor and vulnerable populations and providing better services to target groups.

Various methodologies are used in the collection of qualitative data including, among others, patient satisfaction surveys, desk reviews, patient/staff observation, mapping exercises, key informant interviews, focus groups, participatory rural appraisals, and rapid ethnographic studies. For more information on these methodologies, refer to: <http://www.fhi.org/en/hiv aids/pub/archive/evalchap/inex.htm>.

Ideally, a mixed qualitative and quantitative approach should be utilized when collecting and analyzing information. The mixed methodological approach will contribute to a more substantial understanding of program progress, ensure triangulation of data sources and reduce biases in the data.

## Technical assistance

A significant development in the areas of technical assistance has been the deployment of country M&E staff by some agencies such as UNAIDS and the Emergency Plan. They have an important role in coordinating M&E efforts among partners and countries. Information on technical assistance with links and resources is provided in the individual disease component sections (HIV/AIDS, TB/HIV, TB, Malaria, Health Systems Strengthening).

In 2005, the UNAIDS Monitoring and Evaluation Technical Assistance System (METAT) was established and supported by a number of partners including the Global Fund, the Emergency Plan and WHO. METAT aims to broker requests for M&E technical assistance from countries and programs with the supply of expertise from technical partners. The main purpose of the system is to take requests and distribute them to relevant partners and track M&E technical assistance and the outcome of such requests. This aims to broker the request for technical assistance with local needs. With the “Task List/Work Order” feature, users are able to follow the course and deal with requests from the initial phase to the last step, i.e., when the request has been responded to appropriately. An analysis of the type of technical requests received through METAT is done on a regular basis to identify gaps and proactive solutions. This system is in its early stages of implementation.

To join METAT as a member or for more information on the system, please contact UNAIDS Secretariat at [helpME@unaids.org](mailto:helpME@unaids.org). The service is also being extended to M&E technical assistance in relation to malaria and TB through the relevant partners for each disease.

Technical assistance and links to technical resources and websites for each disease are presented in the disease specific sections.
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# IV. Frequently asked questions

## Operational questions

### 1. How to select indicators from the core list provided in this toolkit?

In deciding on a set of indicators, countries are *not* limited to the core list presented in this toolkit and should report *only on a limited set of indicators* from this toolkit. The choice of indicators should be driven by the goals and objectives of the national program or project. Where indicators fit needs, national programs are encouraged to use the core indicators proposed in this toolkit to ensure standardization of information over time. The core indicators have been tried and tested and have proved to provide useful and reliable information. Countries should aim to simplify M&E and report a limited and standardized set of indicators internationally.

The following guiding principles help in choosing the most appropriate set of indicators and associated data collection instruments:

- Use a conceptual framework for M&E for proper interpretation of the results.
- Ensure that the indicators are linked to the goals and objectives, and that they are able to measure change over the program time period.
- Ensure that standard indicators are used to the extent possible for comparability over time or between population groups.
- Ensure that indicators relate to defined services which are delivered by the program. Attempt to define the standard package of services provided by the program and the groups targeted.
- Consider the cost and feasibility of data collection and analysis.
- For HIV/AIDS, take into account the stage of the epidemic.
- **Keep the number of indicators to the minimum needed**, with specific reference to the level of the system that requires and will use indicators to make programming and management decisions.

Additional indicators can always be identified later or may be collected for project management. For international reporting, a small set of indicators which are standard and comparable internationally is recommended. They do not need to capture the initial stages of the framework, e.g. inputs and process, but do need to focus on the outputs and outcomes of services delivered.

### 2. Does planning of data collection require different strategies for different indicators?

The cost, difficulty, and capacity required for collecting information usually increase as indicators shift from input to output, outcome and impact. It should be possible to collect data for *input* and *output* indicators centrally from routine health information systems, provided that such systems exist and are functional. Program planners should take strategic advantage of the increased attention to HIV/AIDS, TB, and malaria programs and request funding for strengthening national health information and surveillance systems that can be used to report on all these as well as other disease-specific programs.

In addition, if projects are setting up their own M&E components, **one of the first steps should initially be to coordinate with other projects in the country** (e.g. PEPFAR, World Bank, the Global Fund, major NGOs and government activities) in order to reduce overlap and use common data standards, software, systems, and indicators where possible.

Data for many *outcome* and *impact* indicators are collected through more costly and difficult population-based or health facility surveys, requiring some expertise in research methods. Outcome measurement is usually more difficult in view of the sensitivity and specificity of each indicator. However, programs can often leverage ongoing surveys and baselines already undertaken in the country.

### 3. How can we capitalize on existing data collection efforts?

In devising their data collection plans, countries should take into account to the extent possible:

- The existence of data already collected by agencies not directly involved in one of the three specific diseases, but that can help in monitoring;
- The timing of costly population-based surveys such as DHS in which modules can be included to obtain data on a number of indicators relevant to the three diseases; and

- The activities of other major programs in the country (e.g. PEPFAR, World Bank, Global Fund, major NGOs and government activities) to reduce overlap and use common data standards, software, systems, and indicators where possible.

#### **4. What resources should be allocated to M&E from the total national program budget?**

Ensuring that resources are well used requires a coherent M&E system. It is therefore recommended that about 5-10 percent of the national program budget is used for M&E; 7% is generally accepted. The same rule should be applied at sub-national level. This percentage should be based on the total of all resources, including external donor and national funding together. Between 3 percent and 5 percent of regional and district (where appropriate) financial resources should be devoted to M&E activities at regional and district levels.

Funders are increasingly realizing that project funds should be allocated to the development of an M&E system so that information related to the project can be collected, reported, and used. As a result, additional resources have become available as part of larger grants. This allows for the development of coherent systems rather than ad hoc efforts. These should provide standard indicators so that data for a number of projects, departments and donors can be provided. Resources from any one donor should be used to fill gaps in the M&E system in a coordinated way.

#### **5. What is the best way to optimize the use of M&E funds?**

The following recommendations help ensure that M&E funds are properly invested:

- Develop coordinated systems rather than implement ad hoc data collection efforts. The initial investment cost is to be seen in light of the incremental benefit of more regular or more extensive data collection, ultimately resulting in a less costly exercise.
- Consider both short and long-term needs to ensure smooth continuity of national programs.
- Mobilize key M&E players at country level through a M&E support group to avoid duplication of efforts.
- Use commonly agreed upon M&E frameworks for comparability purposes.
- Ensure that large surveys collect data that will address relevant indicators.

#### **6. How to optimize the use of data?**

The ultimate goal of data collection is to ensure that data are fed back into the decision-making process. Data are powerful tools for advocacy, generating resources, accountability, program design and improvement, and attributing changes to specific interventions and programming (or reorientation of programs). Based on lessons learnt over the past years, the following steps help optimize the use of data:

- Produce quality data. This requires serious investment throughout the data collection process.
- Assess how data will be used, and make it as transparent and widely available as possible.
- Identify the different end-users, and present and package the data according to their needs, focusing on a minimal number of indicators at each level.
- Set up mechanisms for an efficient data-use system, including feedback through supervision at all levels, and assurances that data at a given level is relevant and actionable at that level.
- Ensure ownership throughout the data collection exercise, which means that national and local M&E capacities must be strengthened to guarantee uniform and quality data within a sustainable framework.
- Ensure that an M&E support group with strong presence of key stakeholders such as the government, donor agencies, NGOs, civil society and academic institutions is established to guide the government throughout the development and implementation of national M&E strategies. This will improve the credibility of the data generated by the government.
- Allocate sufficient resources for the development and implementation of a data-use plan.
- Ensure that data are used as widely as possible and made transparently available in the public domain.

#### **7. How can we avoid donor demands driving health information investments?**

To ensure that donor demands do not drive health information investments – with the risk of having different competing demands – the following steps are recommended:

- Establish a platform under country leadership with strong donor involvement, such as M&E country coordinating committee with high level support.
- Advocate for building a health information system that provides quality and timely information.

- Use – to the extent possible – commonly agreed upon M&E frameworks and standard indicators.
- In cases where two or more donors have multiple demands, a consensus should be reached through in-country coordination mechanisms.
- Before establishing M&E systems, check with other projects/programs and national focal points in the country to reduce parallel systems and reporting.

## 8. What are the key lessons learnt from successful M&E systems?

Most importantly, data should be used -for management and funding decisions- to sustain any M&E reporting system. Below is an illustrative list of key lessons:

- M&E systems must be as simple as possible. Most programs and projects collect far more data than they use. The more complex a M&E system, the more likely it will fail. It is important that data is used as a basis for ongoing decision making.
- M&E systems must include a standardized core set of tools to collect and analyze data. If each implementing partner uses different systems or tools, the data cannot be analyzed or summarized effectively. The need for a standardized core set of tools does not preclude individual implementing partners from collecting additional situation-specific M&E data.
- Good M&E requires both internal self-assessment and external verification. Thus, while implementing partners should collect and verify their own internal data, an external agency should verify the completeness and accuracy of the data collected by those implementing partners. Supervisory visits should be based on the analysis of internal self-assessment and externally verified primary data.
- A specialized entity is required to collect, verify, enter and analyze primary M&E data from each partner. Without such an entity, reliable data collection, verification and analysis are unlikely to occur as Ministries and other public agencies are seldom equipped to manage such a process. Increased resources devoted to HIV/AIDS, TB and malaria should be used to build local capacity within such a national organization.
- M&E must be built into the design of a program and must be operational when grant implementation begins, not added later. It is much harder and less effective to “retrofit” M&E after grant implementation is underway.
- Sub national data are important for the national level data collection as they can be aggregated up to this level. However, sub national data are more relevant to program managers in making day to day decisions.
- Data should be made available as widely and transparently as possible, and wherever possible placed in the public domain. M&E is about promoting the use of data.

No matter how sound an M&E system may be, it will fail without widespread stakeholders “buy-in.” Thus, a large-scale, participatory process in the development and implementation of M&E strategies is essential to build ownership and “buy-in” from the start.

## Common questions on the toolkit and Global Fund reporting

### 1. How is the M&E toolkit used by the Global Fund?

The Global Fund raises money, allocates funds to programs, and shows these funds help fight HIV/AIDS, tuberculosis and malaria. In brief, it aims to “**raise funds, spend them and help prove their contribution to fight the diseases**” in partnership with other international and national organizations, and crucially with the projects which implement the grants.

The Global Fund is a **financing mechanism** rather than a technical agency. The Global Fund does not develop new or its own indicators, but builds on indicators already used by partners and countries (agreed in this toolkit). It has therefore brought together technical agencies to agree on a core set of indicators across the three diseases which are presented in this toolkit. Standardization is important, to simplify monitoring and evaluation efforts. Furthermore, it allows the Global Fund to describe progress and coverage across its whole portfolio of grants for very varied projects and settings.

**Performance-based Funding** is central to the Global Fund mechanism, to ensure raising, spending and proving the contribution of funds are closely related. Funds are released when progress against agreed targets is met. This requires that:

- Overall **goals** are clearly formulated
- Services are clearly defined, grouped into **service delivery areas**, and related to goals

- **Indicators are chosen, targets set** and progress reported regularly

The Global Fund relies on a **minimal set of indicators** which are agreed by a wide range of partners and used in countries as captured in this toolkit. Reporting should draw as much as possible from existing M&E systems and not provide an additional reporting burden. The Global Fund wants to increase the coverage of quality services, and therefore for each service it is important to report regularly on people reached, service points supported and people trained in providing the service.

Routine reporting	Medium-term reporting (one to five years)
<ul style="list-style-type: none"> <li>• People reached by services (numerators)</li> <li>• Number of service points supported</li> <li>• Number of providers trained in service</li> </ul>	<ul style="list-style-type: none"> <li>• Impact on the three diseases</li> <li>• Behavior changes</li> <li>• Percentage of target groups reached by services (numerators and denominators)</li> </ul>

In addition, over the medium term (1-5 years), the Global Fund wants to ensure that **evaluation** of the impact on the three diseases, changes in behaviors, and the percentage of target groups reached (numerators and denominators) are measured. These are seen as the outcome of collective efforts, should leverage national data sources, and are not necessarily directly attributable to the specific program.

Performance will be based on how well different indicators can be measured, documented and verified against agreed targets to achieve the goals of the proposal. There are therefore very strong incentives to have clear, simple, measurable and well communicated results on a regular basis. Wider measures of progress should also be reported, but **core performance will rely on a few clear and meaningful targets**.

Performance-based Funding helps ensure that money is well spent relative to project goals, and ultimately services are provided to those affected by disease. Funds raised do not belong to the Global Fund nor to the programs supported, but to the people who need services with urgency. Performance-based Funding also develops an evidence base and platform to advocate sustained and dependable funding.

#### Performance-based Funding framework

The Global Fund's system for **Performance-based Funding** aims to:

- **Ensure money is spent on services for people in need**
- Relate disbursements to achievement of targets
- Provide incentives to focus on results and timely implementation
- Free up committed resources from non-performing programs for re-allocation to programs where results can be achieved

## 2. At what stages do grants report on results?

The Global Fund has developed a set of tools in collaboration with technical partners to facilitate grant management and Performance-based Funding throughout the lifecycle of a grant. These tools track relevant performance targets and achievements by using a clear set of indicators and targets taken from the original proposal and built into the Grant Agreement. They ensure reported data are used, and used for decisions at each stage.

The information collected is used at three main stages of performance evaluation:

- **Regular Disbursements (6 monthly as the default):** Agreement on a few indicators of progress is used for regular Financial Release on a quarterly or 6 monthly basis. Finances are released based on disbursement requests accompanied by progress updates of results against targets with an explanation or self assessment from the program. Grants do not need to set targets and report results for every indicator in every reporting period. Reporting periods should be aligned with the National information system. Grantees need to explain reasons for deviation of results from targets.
- **Annual reviews (every 12 months):** These collect the results for all indicators for the year and include a self-assessment of progress, barriers, successes and failures. The Global Fund uses these updates to report on progress in program implementation across its portfolio, and as a key source of contextual information to interpret the minimal performance focus of results against targets. The Global Fund does not request a specific report and can use existing annual reviews or yearly program reports.

- **Phase 2 evaluation (from 18 to 20 months):** Funding is committed for a first period of two years. After 18 months the program makes a submission for Phase 2 funding to cover up to an additional three years (a total of 5 years of funding). An overall review of performance is used as a basis for the Secretariat of the Global Fund to recommend further funding into Phase 2. This includes a comprehensive report on results against targets, against the goals of the proposal, and of the delivery of key services relevant to fighting the three diseases. Self assessment by the program is an important element, including the possibility to suggest changes in the program from experience. Although targets should not be changed, explanations of deviance of results from targets are taken into account in rating performance. A **Grant Scorecard** is prepared combining the aggregate results with independent verification and assessment of data on the grant's performance. The Grant Scorecard becomes the basis for the Phase 2 funding decisions taken by the Board.

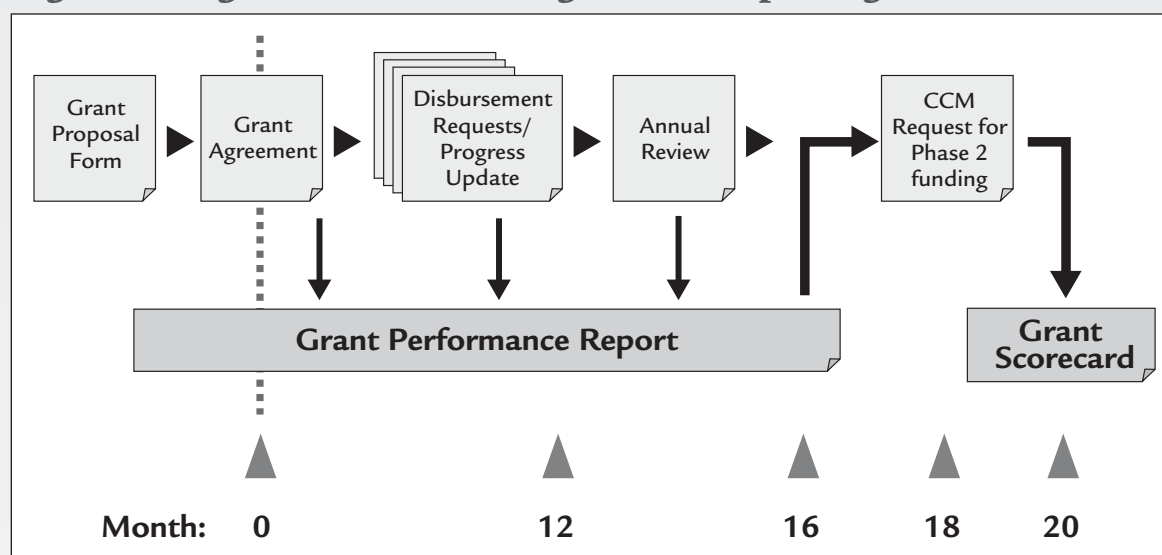
While Performance-based Funding of grants reaches a critical milestone at the Phase 2 funding stage, the measurement and evaluation system starts at the beginning of a grant when indicators and targets are agreed by recipients and the Global Fund and made part of the first grant agreement.

Targets are tracked at every stage in the process (as shown in the figure below): defined in the grant proposal, incorporated into the grant agreement (in M&E grant attachment), progress reported before each disbursement (progress update), in annual reviews, and consolidated in the CCM request for continued funding for Phase 2, and beyond into Phase 2 reporting. Performance-based Funding occurs continuously throughout the grant's life.

It is important to note that the aim of Performance-based Funding is to use reported results actively, as the basis for self assessment and decisions in programs and at the Global Fund. Results against targets are only the basis of a performance rating. As important are the self assessment and explanation of progress by the program, and corrective measures proposed to ensure rapid learning and scale up of programs. Overall performance incorporates both the hard quantitative elements of results against targets and the qualitative assessment of progress and important contextual factors.

Finally, **country ownership** provides the basis for Performance-based Funding. Targets should be derived from country proposals, and agreed by both sides in the Grant Agreement.

**Figure 1: Stages of a Global Fund grant and reporting on results**



### 3. How to use the toolkit for a Global Fund grant?

The M&E toolkit should be used to guide the proposal application, finalize the M&E grant attachment where indicators and targets are incorporated, and to guide reporting throughout the grant lifecycle. There should be an M&E plan which can, if relevant, be a plan which already exists in the country. The toolkit is then used to choose the limited set of indicators to be used from the more extensive M&E plan and system and those for which targets are set as a basis of reporting to the Global Fund. It is important to distinguish between levels of M&E, the more **extensive set of indicators needed to manage a program**, and the **few indicators needed for donor and international reporting**.

The Global Fund aims to reach people with quality services to impact the control of three diseases. As the program becomes established, reporting shifts to information regarding increased number of people reached, and then outcome and impact indicators. The Global Fund aims to simplify reporting focusing on:

- **Capacity building (from grant start):** people trained and service points supported
- **People reached by services (within 12 months):** for prevention, treatment, care
- **Fighting the diseases (1 to 5 years):** behavioral change and disease impacts

The Global Fund recognizes that this requires strengthening of health systems, and therefore the toolkit also includes indicators and service delivery areas related to the strengthening of health systems. These can be included in disease components for HIV/AIDS, TB and Malaria directly.

A central aim is to increase coverage of prevention, treatment and care of HIV/AIDS, TB and malaria and to be able to measure the coverage. To show this internationally across many countries and programs, a few high level standard indicators that are provided by grant recipients of people reached by services, are highly valued.

In addition, changes to population behaviors and disease impacts are reported over time, in collaboration with country partners. Alongside traditional stages of M&E, increased delivery of services is emphasized (training, service delivery points supported and people reached) to evaluate whether more people are being reached by more quality services. The following table is a tentative approach to link the international framework with the different levels of reporting to the Global Fund.

**Table 4: Tentative approach to link the international framework with the different levels of reporting to the Global Fund**

International Framework	Global Fund reporting Framework	Examples of Areas
Input indicators	Capacity building (people trained, service points supported)	<ul style="list-style-type: none"> <li>• Human Resources</li> <li>• Policy formulation</li> <li>• Financial inputs</li> <li>• Infrastructure building and rehabilitation</li> </ul>
Process indicators		<ul style="list-style-type: none"> <li>• <b>People trained</b></li> <li>• Drugs procured</li> <li>• Basic needs and commodities procured</li> <li>• Coordination ensured</li> </ul>
Output indicators		<ul style="list-style-type: none"> <li>• Service delivery points supported (<b>Number of service points supported</b>)</li> </ul>
Outcome/ Impact indicators	People reached by services (and services delivered)	<ul style="list-style-type: none"> <li>• People benefiting from interventions (<b>Number of people reached by the services</b>)</li> </ul>
	Fighting the three diseases (behavior change and impact)	<ul style="list-style-type: none"> <li>• Change of behavior, reduced morbidity and mortality</li> </ul>

#### 4. How to simplify M&E and reporting to the Global Fund?

At the country level, there are various systems for data collection and mechanisms to distribute resource flows that feed into the day to day management of grants. The Global Fund focuses only on a small set of indicators (the “tip of the iceberg”) to ensure that grant programs reach more people with the vital services they need.

Grants should only report on a **few indicators for defined service delivery areas in line with achieving its goals and objectives**. In general, a grant should report on a very few indicators per service delivery area (to show people reached by services, service points supported, and people trained). Performance-based Funding is usually undertaken with a focus on 5-10 *key indicators* per grant, with 15 reported in total.

In addition, grants should **leverage existing national M&E systems** in countries. These systems are fundamental for reporting to the Global Fund. There is a clear distinction to be made between the information that will be collected for program management and M&E purposes at the country level (many more indicators) and what is submitted to the Global Fund to assess programmatic performance (focused on 5-10 key indicators, with 15 indicators reported in

total). The indicators reported to the Global Fund should be a simplified set from the overall M&E plan. The reporting to the Global Fund needs to capture a small subset of information. However, in order to provide that information, the country needs to have a strong base on which data can be captured. Core performance will be based on how well different indicators can be measured, documented and verified against agreed targets for each service delivery area.

Not only does performance evaluation serve to ensure that funds are allocated correctly, but it also provides a **platform for programs to communicate evidence of progress internally and externally, and make the case for sustained funding.**

The M&E plan should build on existing national programs and policies wherever possible. The M&E plan is a central part of grant applications, the grant agreement signed by both sides, and the basis for ongoing “Performance-based Funding”. Whenever an M&E plan exists for a national program, the M&E reporting framework for the Global Fund should be drawn from it. Many of the indicators covered in the toolkit are therefore only the “tip of the iceberg” of the full monitoring and evaluation plan and they need to be interpreted in this wider context.

## 5. How to choose indicators and targets to report to the Global Fund?

Programs or projects should have clear defined goals and objectives. This is the starting point of reporting to the Global Fund. To achieve these, service delivery areas should be defined, from which indicators are selected. These indicators need to be reliable and measurable on a regular basis. The consistency of goals and services delivered is important so as to be able to evaluate over the medium term, progress in fighting the three diseases in terms of impact and behavior change.

**Overall Goals** are broad and overarching, for example “*reduced HIV-related mortality*”, “*reduced burden of tuberculosis*”, “*reduced transmission of malaria*”. For each goal, **impact indicators** must be chosen.

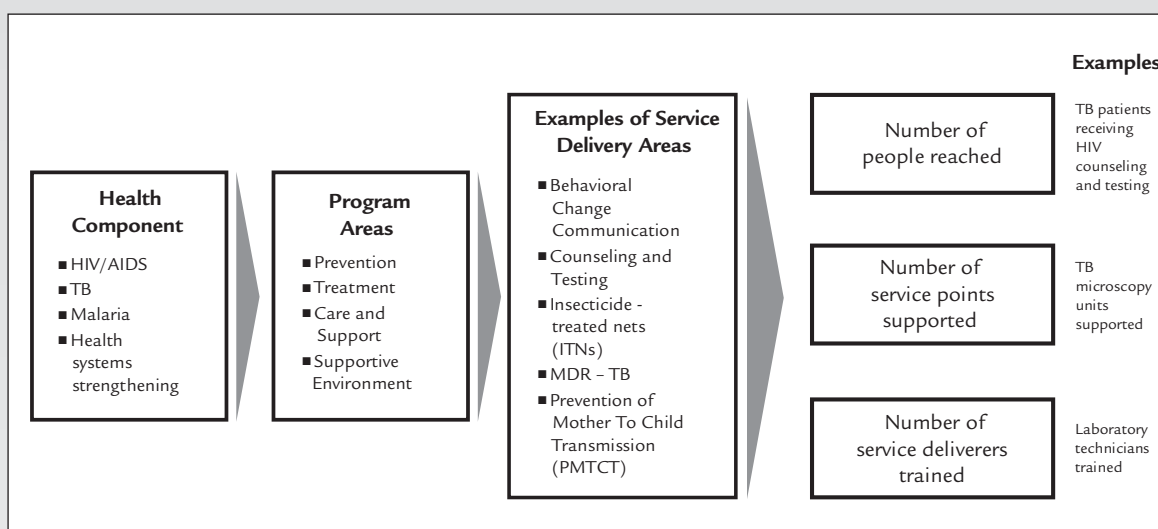
**Objectives** need to be clearly described for each goal. An objective describes the intention of the programs for which funding is sought and provides a framework under which services are delivered. Examples of objectives include “*improving survival rates in people with advanced HIV infection in four provinces*”, “*to reduce transmission of tuberculosis among prisoners in the ten largest prisons*”, “*to reduce malaria-related morbidity among pregnant women in seven rural districts*”.

The next step, and the core of regular Performance-based Funding is to identify key **services to be delivered**, and provide, for each of them, **indicators with targets** that can be measured and can show regular programmatic progress. Under each objective, indicators are therefore grouped under their respective **Service Delivery Areas** (a service delivery area corresponds to a specific service that is provided).

A program has one or two goals. Each goal has an objective, each objective includes several Service Delivery Areas, and each SDA is evaluated on one or more indicators.



**Figure 2: The relationship between disease components, service delivery areas and indicators**



The Global Fund puts particular value on reporting of a set of “top ten” indicators measuring people reached with services that it can report on internationally and regularly across the entire portfolio. These are standard services which can be reported on at the international level. They are for frequent routine reporting, for regular disbursements of money. **These indicators should be incorporated into grant reporting wherever the services are provided.**

**Table 5: Top Ten Indicators for routine Global Fund reporting**

	Top Ten Indicators for routine Global Fund reporting	Disease
1	Number of people with advanced HIV infection currently receiving <b>anti-retroviral combination therapy</b> (ARV)	<i>HIV</i>
2	Number of a. <b>new smear positive TB cases detected</b> , b. new smear positive TB cases that <b>successfully complete treatment</b> and c. TB cases enrolled to begin <b>second line treatment for multi-drug-resistant TB</b>	<i>TB</i>
3	Number of <b>ITNs</b> (including retreatment kits for existing nets) distributed to people at risk (or, where appropriate, number of houses receiving indoor residual spraying according to national policy)	<i>Malaria</i>
4	Number of people with uncomplicated or severe malaria receiving <b>anti-malarial treatment</b> as per national guidelines (specify ACT/non-ACT)	<i>Malaria</i>
5	Number of people <b>counseled and tested for HIV</b> including provision of test results	<i>HIV</i>
6	Number of HIV-positive pregnant women receiving a complete course of anti-retroviral prophylaxis to reduce mother to child transmission ( <b>PMTCT</b> )	<i>HIV</i>
7	Number of <b>condoms</b> distributed to people	<i>HIV</i>
8	Number of people benefiting from <b>community-based programs</b> (specify, a. Prevention b. Orphan support c. Care and support)	<i>HIV/TB/Malaria</i>
9	Number of cases treated for <b>infections associated with HIV</b> (specify, a. Preventive therapy for TB/HIV, b. STIs with counseling)	<i>HIV/TB</i>
10	Number of <b>service deliverers trained</b> according to documented guidelines (specify a. Health services b. Peer and community programs)	<i>HIV/TB/Malaria</i>

In the **medium to long-term (1-5 years)**, **outcome and impact indicators** that show decreases in disease incidence or prevalence and behavior change should be selected. Please note that **planning for these indicators should begin at the start of the grant**, and that they require clear baseline values. These indicators are usually more difficult and costly to collect and correspond to the contribution of all stakeholder efforts and programs in-country. Existing surveys should be leveraged, and data analyzed as part of a national collective effort. Programs should draw as far as possible from existing surveillance information, including impact and evaluation studies implemented in-country. If these surveys do not exist the Global Fund encourages the country to develop and implement such studies in partnership with other



technical partners in-country. Global Fund program funds should be used to fill in gaps, and investments in both monitoring and evaluation are strongly encouraged.

**Table 6: Top Ten Indicators for medium term outcome and impact**

	Top Ten Outcome and Impact Indicators	Disease	Source
1	Percentage of young women and men aged 15-24 who are HIV infected ( <b>HIV prevalence</b> ) (applicable to most-at-risk populations in concentrated/lower epidemics)	HIV	UNGASS
2	Percentage of adults and children with HIV still alive 12 months after initiation of anti-retroviral therapy (extend to 2, 3, 5 years as program matures) ( <b>Reduced mortality</b> )	HIV	UNGASS
3	Percentage of infants born to HIV infected mothers who are HIV infected ( <b>Reduced mother to child HIV transmission</b> )	HIV	UNGASS
4	Percentage of young people aged 15-24 who had sex with more than one partner in the last year ( <b>Multiple Partners</b> )	HIV	WHO/ UNAIDS
5	Percentage of 15-19 year olds who never had sex ( <b>Primary abstinence</b> ) and percentage of 15-24 year olds who never had sex in last year of those who ever had sex ( <b>Secondary abstinence</b> )	HIV	WHO/ UNAIDS
6	Percentage of young people aged 15-24 reporting the <b>consistent use of condoms</b> with non-regular partners	HIV	WHO/ UNAIDS
7	<b>TB case detection</b> rate and <b>treatment success</b> rate	TB	WHO StopTB
8	Estimated number of all active TB cases per 100,000 population ( <b>TB prevalence rate</b> )	TB	WHO StopTB
9	<b>Death rates associated with malaria:</b> all cause under-5 mortality in highly endemic areas	Malaria	WHO RBM
10	<b>Incidence of clinical malaria cases</b> (estimated and/or reported)	Malaria	WHO RBM

Baselines are determined and targets are set for successive regular measurement over five years. The timing of the measurement of these regular targets should, as far as possible, be aligned with existing data collection and reporting systems. Please note that all indicators do not need to be reported on for each disbursement period, but results should be consolidated on a yearly basis in the annual review. These targets are generally the aims of a variety of activities, national programs and collaborators working together, not just an individual project.

#### It is important to remember:

- To extract indicators from existing M&E plans, in line with national strategies, wherever possible.
- Select simple indicators (which have already been tested) with existing tools to collect them.
- Ensure a good balance between periodic surveys and routine health statistics data. Surveys can complement information gaps in HMIS, in particular for outcome and impact indicators. However, the surveys generally do not provide results as regularly as routine systems to report on six monthly disbursements.
- **Set baselines for each main indicator.** Results reported should be cumulative over each phase of funding, and generally should exclude baselines. The exception is if people are carried forward into the program, e.g. people on an ARV pilot program are treated under the grant.
- If results are in **percentages, there is a need to provide numerators and denominators.**
- Avoid double-counting the same individual within one program/service area during each reporting period. However, it is acceptable to count the same person in multiple program/service areas (for example ARV and Palliative Care).
- Training refers to either new training or retraining of individuals and assumes that it is conducted according to national or international standards when these exist. It is very important that the recognized standards of training are recorded (including objectives, duration, follow-up), and that follow up is undertaken to ensure that these individuals become active and practice service delivery.

## V. Component-specific reporting framework

This section of the toolkit presents selected (1) programmatic and (2) outcome and impact indicators for HIV/AIDS, TB, and malaria. In addition, indicators for Health Systems Strengthening are provided. Summary tables show an overview of selected indicators, the annexes provide more detailed supporting descriptions. These indicators have been developed, discussed and agreed upon by a wide range of international and national experts and donors. They have been developed for the specific purpose of minimizing information demands on countries. The indicator development process was guided by six major principles:

- Building on existing indicators
- Minimizing the number of indicators to be collected
- Selection of indicators that are collected regularly through health information systems or acknowledged population-based surveys (MICS, DHS, DHS+)
- Coordinating national and donor M&E needs
- Harmonizing with other international frameworks such as UNGASS and the Millennium Development Goals (MDGs)
- Covering a wide range of program areas and sectors related to HIV/AIDS, TB, and malaria

For each disease, general program areas have been defined. In the case of HIV/AIDS, for example, these include prevention, treatment, care and support, and supportive environments. The **Toolkit Annexes** give information regarding:

- Rationale for use
- Definition, including numerator and denominator
- Measurement – i.e. details on instrument and process, comprising:
  - o Measurement tools: health services statistics, health facility surveys, qualitative methods, sentinel sites surveillance, population-based surveys
  - o Recommended periodicity of data collection
- Resources – i.e. reference groups, technical assistance sources, guidelines

### Remember

- **Tables presented for each component do not aim to provide a comprehensive overview of all indicators.** Rather, they aim to provide users with a set of the most common indicators used for specific activity areas. For a complete listing of all existing indicators, readers are referred to the guidelines section for each component. These sections list all available M&E guides including program indicators.
- Generic input and output process indicators that refer to counts (such as number of people trained) are usually not defined in the Toolkit Annex.<sup>1</sup> Grants can include the number of people trained and service points supported as generic indicators with the relevant programmatic definitions, e.g. of clear training standards.
- In order to facilitate the referencing of indicators from the summary tables to the related annexes, indicators have been named according to their activity area (i.e., prevention, care and support, treatment and outcome indicator) and a number (i.e., 1, 2, 3, etc.). Therefore, the first prevention indicator is named PI (prevention indicator) 1, and so on. The references do not relate to any categorization of the same indicators in other publications.
- **Health Systems Strengthening (HSS) is included as a separate section in this toolkit. However any HSS service delivery area can also be built into disease specific grants. The details and rules for each round of Global Fund funding should be consulted to assess the best strategy.**

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<sup>1</sup> These are generally common from a medical/public health perspective across the three disease areas and are therefore not specified for each. While there are some differences across the three diseases, these indicators generally take on the following forms: (1) **Generic input indicator:** Existence of national policies, guidelines, or strategies. This is a “yes” / “no” question. Reporting of overall budget allocation is included as an input. (2) **Generic output indicator:** Number of persons trained, number of drugs shipped/ordered, etc.

## VI. HIV/AIDS

This section of the toolkit provides an overview of indicators at the output, outcome and impact levels and general M&E resources for HIV/AIDS. Most indicators listed are extracted from international M&E guidelines which have been developed jointly by key international partners to avoid duplication of efforts and to minimize country burden. For this reason, although some indicators may inevitably be revised over time, the use of the agreed upon indicators is strongly encouraged where appropriate.

Most of the HIV/AIDS indicators are *applicable* to most settings, the main exception being indicators covering injecting drug users (IDUs) and HIV prevalence. The IDU indicator is applicable to countries where injecting drug use is an established, significant mode of HIV transmission. Likewise, the indicator for orphans and vulnerable children (OVCs) will be less relevant in low level/concentrated epidemics. Countries with low HIV prevalence or concentrated epidemics should report on an alternative indicator of HIV prevalence among high-risk behavior groups, as well as prevalence among young people obtained from antenatal clinic sentinel surveillance.

Details of the most recent indicators for the different programs or initiatives can be found in the original sources referenced at the end of this section. The field has been moving rapidly but key partners have reached consensus on a number of indicators for the various programs or initiatives. The recent scaling-up of ARV therapy, under the 3 by 5 Initiative of WHO, the Emergency Plan, World Bank, the Global Fund and other partners, has led to a number of international M&E guidelines addressing prevention, care and treatment. Additional and alternative indicators may be found in other documents referred to in the section entitled “Guidelines and essential references”.

A number of high level goals have been defined as part of the Millennium Development Goals (MDGs), UNGASS targets, and G8 leaders’ commitment:

### Key HIV/AIDS Goals and Targets

#### Millennium Development Goals (MDGs):

Goal 6: Combat HIV/AIDS, Malaria and other diseases

Target 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS

#### UNGASS targets – Universal access to ARV programs by year 2010:

- By 2010, 95% of young women and men aged 15-24 both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission
- By 2010, 25% of reduction globally of young women and men aged 15-24 who are HIV infected
- By 2010, 50% reduction of infants born to HIV infected mothers who are infected

#### G8 leaders’ commitment:

“To provide as close as possible universal access to treatment for AIDS by 2010”

WHO, together with UNAIDS, have defined a package of interventions for HIV/AIDS. Some or all of these interventions can be applied to the different target groups under consideration in the programs:

- General population
- Population sub-groups (youth, women, men, pregnant women, others)
- Most-at-risk population (MARPs) – (IDU, MSM, CSWs and their clients)
- Orphans and Vulnerable Children (OVCs)

Each country/program defines the specific package that is to be applied for the target population.

## Measurement tools and data sources

The primary measurement tools are:

- Health facility-based statistics
- Community-based program reports
- Surveillance studies

- National representatives, population/based sample surveys such as Demographic and Health Survey (DHS and DHS+, AIS, Multiple Indicator Cluster Surveys (MICS))
- Schools, health facility and workplace surveys
- Specially designed surveys and questionnaires, including surveys of specific groups (e.g., targeted surveys of most-at-risk populations and specific service coverage surveys (SAM and the National Composite Policy Index questionnaire)).

Existing monitoring resources, including records and program reviews from health facilities and schools, as well as specific information from HIV&AIDS and sexually transmitted infections (STI) surveillance activities and control programs, should supplement the primary measurement tools. Civil society is also a valuable source of data for many indicators, especially those that relate to interventions where non-government, faith-based and community-based organizations play an active role, including work with young people, most-at-risk populations and pregnant women.<sup>2</sup>

## Ensuring Quality Services

The quality of activities and services being implemented are crucial to achieve desired results. If interventions being implemented are of poor quality, the results of the activities will not be optimal even if the intervention was able to attain high coverage. Thus it is important to monitor the *quality* of activities and services to ensure effective progress. These should be built into any M&E plan in support of the output indicators reported.

Although many of the indicators listed in the toolkit ultimately count the number of facilities providing services or the number of people reached, the quality component of these indicators should be carefully documented with reference to national and international standards of service delivery. For example, the number of people trained on ARV does not aim to solely capture everyone trained on ARV, regardless of the content of the training; the intent is to capture the number of people who are trained according to a *specific criteria* or meeting an acceptable standard. Likewise, the number of facilities providing a particular service tries to capture the facilities which have systems and items meeting a *certain criteria*. In line with the “Three Ones,” it may be useful for countries to introduce an accreditation process for facilities<sup>3</sup> or a certification process for those trained in certain service delivery areas<sup>4</sup> in order to have a standardized way of ensuring that quality of services are provided.

**Changes from the first version of the M&E Toolkit:** The same measurement framework is used, which is compatible with reporting outlined in the initial toolkit. Significant changes are: TB/HIV is included in both the HIV and the TB section, community outreach activities are expanded and MARP prevention is included in the HIV section. Where specific services are provided to MARP or population subgroups (e.g. Counseling and Testing), they should be specified under these services with an indicator related to the specific groups. Youth education is now included in Behavior Change Communication. From experience, precise services were often not well defined, when youth and MARP were taken as separate SDAs rather than captured with precise indicators for standard service delivery areas.

<sup>2</sup> Text extracted from UNGASS Guidelines on Construction of Core indicators, 2006.

<sup>3</sup> WHO is currently in the process of producing a guide for an HIV care accreditation program which will provide an overview of the various components and minimum requirements of an accreditation program as well as how to set up such a program. In conjunction, WHO will also produce an operational guide for accreditation processes.

<sup>4</sup> WHO is currently in the process of developing certification tools and procedures for the IMAI (integrated management of Adult and Adolescent Illnesses) Basic ART guide as well as for PMTCT training materials.

**Table 7: Selected Programmatic Indicators for HIV/AIDS**

Most of these indicators can be collected through monthly health statistics and the annual program review. However, some may be best collected through surveys, such as school based surveys. Generic indicators measuring *number of people trained* and *service points supported* can be used for service delivery areas where these are not specifically defined.

	Service Delivery Area	Output Indicators	Examples of Outcome Indicators
Prevention	<b>Behavioral Change Communication – Mass media</b>	<ul style="list-style-type: none"> <li>HIV/AIDS information, education, communication (IEC) material broadcasted or distributed (radio &amp; television programs / newspapers) (number)</li> </ul>	<ul style="list-style-type: none"> <li>People (by age and sex) who had sex with more than one partner in the last year (percentage) (<b>Multiple Partners</b>) (HIV-OI 1) (can be applied for MARP or population sub-groups)</li> <li>IDU who have adopted behaviors that reduce transmission of HIV (percentage) UNGASS (HIV-OI 5)</li> </ul> <p><i>See Table 8 for further behavior indicators</i></p>
	<b>Behavioral Change communication – community outreach</b>	<ul style="list-style-type: none"> <li>Young people reached by life-based HIV/AIDS education in schools (number and percentage)</li> <li>Schools with at least one teacher who has been trained in participatory life skills-based HIV/AIDS education and who taught it during the last academic year (number and percentage) UNGASS (HIV-PI 1)</li> <li>Young people reached by HIV/AIDS education in out-of-school settings (number and percentage)</li> <li>Young people 15-24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject the major misconceptions about HIV transmission (percentage) UNGASS (HIV-PI 3)</li> <li>Individuals (i.e., peer educators) trained (specify if trained for specific MARP sub-groups) (number)</li> <li>People reached by BCC prevention outreach and peer education (number) UNGASS (can be applied for MARP or population sub-groups)</li> <li>IDUs reached by HIV/AIDS prevention programs* (number and percentage) (HIV-PI 2)</li> <li>MSM reached by HIV/AIDS prevention programs* (number and percentage) (HIV-PI 2)</li> <li>Sex workers &amp; clients reached by HIV/AIDS prevention programs* (number and percentage) (HIV-PI 2)</li> </ul>	
	<b>Condom distribution</b>	<ul style="list-style-type: none"> <li>Condoms sold through the private sector (number)</li> <li>Condoms distributed for free (number)</li> <li>Retail outlets and service delivery points with condoms in stock (number) (HIV-PI 4) (can specify between public and private)</li> <li>Key intervention areas covered with targeted condom outlets (areas with concentration of MARP) (number)</li> </ul>	<ul style="list-style-type: none"> <li>Young people reporting the use of condoms the last time they had sex with a non-regular sexual partner (percentage)</li> <li>Young people aged 15-24 reporting <b>the consistent use of a condom</b> with non-regular sexual partners in the last year (percentage) (HIV-OI 4)</li> </ul> <p><i>See Table 8 for further behavior indicators</i></p>
	<b>Testing and Counseling</b>	<ul style="list-style-type: none"> <li>People who receive HIV testing and counseling (including provision of test result) (number) (HIV-PI 5)</li> <li>Service outlets providing counseling and testing according to national standards (number)</li> <li>MARP who received HIV testing in the last 12 months and who know the results (number and percentage) UNGASS</li> <li>PLWHA who have tested positive who have received counseling for positive prevention (number and percentage)</li> </ul>	



	Service Delivery Area	Output Indicators	Examples of Outcome Indicators
	<b>PMTCT</b>	<ul style="list-style-type: none"> <li>Health facilities providing the minimum package of PMTCT services (number and percentage) (HIV-PI 6)</li> <li>HIV-positive pregnant women receiving a complete course of antiretroviral prophylaxis to reduce the risk of mother-to-child transmission (number and percentage) UNGASS (HIV-PI 7)</li> <li>HIV-exposed infants seen within 2 months of birth for check-up (number and percentage)</li> <li>HIV-exposed infants and children receiving co-trimoxazole prophylaxis treatment (number and percentage)</li> </ul>	
	<b>Post-exposure prophylaxis</b>	<ul style="list-style-type: none"> <li>People receiving post-exposure prophylaxis (number)</li> </ul>	
	<b>STI diagnosis and treatment</b>	<ul style="list-style-type: none"> <li>Patients with STIs at health care facilities who are appropriately diagnosed, treated and counseled (can be applied for MARP or population sub-groups) (number and percentage) (HIV-PI 8)</li> </ul>	
	<b>Blood safety and universal precaution</b>	<ul style="list-style-type: none"> <li>Districts with access to donor recruitment and blood transfusion (number and percentage) (HIV-PI 9)</li> <li>Transfused blood units screened for HIV according to national guidelines (number and percentage) UNGASS (HIV-PI 10)</li> </ul>	
<b>Treatment</b>	<b>Antiretroviral treatment and monitoring</b>	<ul style="list-style-type: none"> <li>People with advanced HIV infection receiving antiretroviral combination therapy (number and percentage) UNGASS (HIV-TI 1)</li> <li>Health facilities that have the capacity and conditions to provide advanced HIV/AIDS clinical care and psychosocial support services, including providing and monitoring ARV (number and percentage) (HIV-TI 2)</li> </ul>	<ul style="list-style-type: none"> <li>Adults and children who are still on treatment after 6 months, 1, 2, 3, 5 years from the initiation of treatment (percentage)</li> </ul>
	<b>Prophylaxis and treatment for opportunistic infections</b>	<ul style="list-style-type: none"> <li>PLWHA receiving diagnosis and treatment for opportunistic infections (number and percentage)</li> </ul>	
<b>Care and Support</b>	<b>Care and support for the chronically ill</b>	<ul style="list-style-type: none"> <li>Adults aged 18-59 years who have been chronically ill for 3 or more months in the past 12 months due to HIV/AIDS, whose households received basic external support in caring for chronically ill adults (number and percentage)</li> <li>Community organizations that received support to assist PLWHA (number)</li> </ul>	
	<b>Support for orphans and vulnerable children</b>	<ul style="list-style-type: none"> <li>Orphans and other children made vulnerable by HIV/AIDS (OVC) whose households received free basic external support in caring for the child (number and percentage) UNGASS (HIV-CS 1)</li> <li>Community organizations that received support to assist OVC (number)</li> </ul>	<ul style="list-style-type: none"> <li>Orphaned children compared to non-orphaned children aged 10-14 who are currently attending school (percentage) (HIV-OI 6)</li> </ul>



	Service Delivery Area	Output Indicators	Examples of Outcome Indicators
TB/HIV collaborative activities	<b>Intensified case-finding among PLWHA</b>	<ul style="list-style-type: none"> <li>PLWHA receiving HIV testing and counseling or HIV treatment and care services who were screened for TB symptoms** (number and percentage) (TB/HIV 1)</li> </ul>	
	<b>Prevention of TB disease in PLWHA</b>	<ul style="list-style-type: none"> <li>Newly diagnosed HIV positive clients given treatment for latent TB infection (number and percentage) (TB/HIV 3)</li> </ul>	
	<b>Prevention of HIV in TB patients</b>	<ul style="list-style-type: none"> <li>Registered TB patients who receive HIV counseling and testing*** (number and percentage) (TB/HIV 4)</li> </ul>	
	<b>Prevention of opportunistic infections in PLWHA with TB</b>	<ul style="list-style-type: none"> <li>HIV positive TB patients who receive co-trimoxazole preventive therapy (number and percentage) (TB/HIV 6)</li> </ul>	
	<b>HIV care and support for HIV-positive TB patients</b>	<ul style="list-style-type: none"> <li>HIV-positive TB patients referred to HIV care and support services during TB treatment (number and percentage) (TB/HIV 7)</li> </ul>	
	<b>Provision of antiretroviral treatment for TB patients during TB treatment</b>	<ul style="list-style-type: none"> <li>HIV positive registered TB patients who have begun or are continuing ARV, during or at the end of TB treatment (number and percentage) (TB/HIV 8)</li> </ul>	

Supportive environment	<b>Policy development including workplace policy</b>	<ul style="list-style-type: none"> <li>Large enterprises / companies that have HIV/AIDS workplace policies and programs (number and percentage) UNGASS (HIV-SE 1)</li> <li>Local organizations provided with technical assistance for HIV-related policy development (number)</li> </ul>	
	<b>Strengthening of civil society and institutional capacity building</b>	<ul style="list-style-type: none"> <li>NGOs providing HIV/AIDS prevention, treatment, care and support services according to national guidelines (number)</li> <li>NGOs actively involved in planning, budgeting, monitoring and evaluation of HIV and HIV/TB activities (number)</li> <li>National Composite Policy Index (UNGASS)</li> </ul>	
	<b>Stigma reduction in all settings</b>	<ul style="list-style-type: none"> <li>Policy makers attending sensitization workshops on HIV/AIDS and HIV/TB (number)</li> </ul>	

\* For each of these sub-groups, the prevention package to apply must be clearly defined: outreach and peer education, exposure to targeted mass media, STI screening and/or treatment, HIV counseling and testing, substitution therapy and safer injection practice for IDUs, or others.

\*\* For this indicator, the number of new cases of TB diagnosed should also be reported. (TB/HIV 2)

\*\*\* For this indicator, the number of registered TB patients who were found to be HIV positive should also be reported. (TB/HIV 5)



Detailed descriptions of the indicators listed above are provided in Annex A of the Toolkit Annexes and the defining guidelines are listed in the following section under “Guidelines and essential references”. It should be noted that the indicators presented above and in the annex are not comprehensive, and readers should refer to the individual indicator guidelines for a more complete listing of all core and additional indicators in this area.

**Table 8: Selected HIV /AIDS Impact and Outcome Indicators**

	Impact Indicators	Reporting schedule	Measurement	Reference
Impact Indicators	• Young women and men aged 15-24 who are HIV infected (percentage) ( <b>HIV prevalence</b> ) (applicable to most-at-risk populations in concentrated/lower epidemics)	Annual	HIV sentinel surveillance and population-based survey	UNGASS
	• Adults aged 15-49 who are HIV infected (percentage)	Annual	HIV sentinel surveillance and population-based survey	WHO/UNAIDS
	• Adults and children with HIV still alive 12 months after initiation of antiretroviral therapy (extend to 2, 3, 5 years as program matures) (percentage) ( <b>Reduced mortality</b> )	Annual	Program monitoring	UNGASS
	• Infants born to HIV infected mothers who are HIV infected (percentage) ( <b>Reduced mother to child HIV transmission</b> )	Annual	Estimate based on program coverage	UNGASS
	• <b>HIV seroprevalence</b> among all newly registered TB patients (percentage) (TB/HIV 9)	Annual	Routine HIV testing, sentinel surveillance, periodic special survey	WHO TB/HIV

	Outcome Indicators	Reporting schedule	Measurement	Reference
Outcome Indicators*	• <b>Multiple partners:</b> Young people aged 15-24 who had sex with more than one partner in the last year (percentage) (HIV-OI 1) (applicable for MARP or population subgroups)	Every 2-3 years	Population-based survey	WHO/UNAIDS
	• <b>Primary abstinence:</b> Young people aged 15-19 who have never had sex (percentage) (HIV-OI 2)	Every 2-3 years	Population-based survey	WHO/UNAIDS
	• <b>Secondary abstinence:</b> Young people aged 15-24 who never had sex in the last year of those who ever had sex (percentage) (HIV-OI 3)	Every 2-3 years	Population-based survey	WHO/UNAIDS
	• <b>Consistent condom use:</b> Young people aged 15-24 reporting the <b>consistent use of a condom</b> with non-regular sexual partners in the last year (percentage) (HIV-OI 4)	Every 2-3 years	Population-based survey	WHO/UNAIDS
	• Young women and men who had sex before the age of 15 (age can be adapted - see guidelines) (percentage)	Every 2-3 years	Population-based survey	UNGASS
	• Adults and children who are still on treatment after 6 months, 1, 2, 3, 5 years from the initiation of treatment (percentage)	Annual	Program monitoring	WHO/UNAIDS
	• Injecting drug users who have adopted behaviors that reduce transmission of HIV. (i.e. who both avoid sharing non sterile injecting equipment and use condoms,) in the last 12 months (for countries where injecting drug use is an established mode of transmission) (percentage) (HIV-OI 5)	Every 2-3 years	Special survey	UNGASS
	• Orphaned children compared to non-orphaned children aged 10-14 who are currently attending school (percentage) (HIV-OI 6)	Every 2-3 years	Population-based survey	UNAIDS/UNICEF
	• Young people aged 15-24 reporting the use of a condom the last time they had sex with a non-regular sexual partner (percentage)	Every 2-3 years	Population-based survey	Adapted from UNAIDS Youth Guide, 2004





	Outcome Indicators	Reporting schedule	Measurement	Reference
Outcome Indicators*	• People expressing accepting attitudes towards PLWHA, of all people surveyed aged 15-49 (percentage)	Every 2-3 years	Population-based survey	WHO/UNAIDS
	• Female sex workers reporting the use of a condom with every client in the last month (percentage)	Every 2-3 years	Special survey	UNGASS
	• Men who have had sex with a female sex worker in the last year (percentage)	Every 2-3 years	Special survey	UNGASS
	• Men reporting the use of condom the last time they had anal sex with a male partner in the last 6 months (percentage)	Every 2-3 years	Special survey	UNGASS

\* HIV sexual behavior indicators should be analyzed together to assess behavior change (as important interactions can occur). Non-regular sexual partners: cohabitation may not be a good measure of non-regular partners in youth..

The following table provides a summary of some of the measurement tools available to support the reporting of indicators. It shows the indicator area, data available, limitations and recommendations. Wherever possible such existing sources of data should be leveraged and used in reporting.

**Table 9: Example of data measurement tools:**

Area	Data Available	Limitations	Recommendations
<b>Impact related to HIV prevalence</b>	<ul style="list-style-type: none"> <li>HIV sentinel site surveillance</li> <li>Population-based surveys which collect specimens for HIV testing</li> </ul>	<ul style="list-style-type: none"> <li>Difficulty to accurately measure or estimate risk population size</li> <li>Sample biases in both approaches</li> </ul>	<ul style="list-style-type: none"> <li>Prevalence estimates should have ranges</li> <li>Use WHO/UNAIDS guidelines for conducting HIV sentinel serosurveys and for measuring national HIV prevalence in population-based surveys</li> </ul>
<b>Impact related to survival on ARV</b>	<ul style="list-style-type: none"> <li>Patient records from facilities aggregated</li> </ul>	<ul style="list-style-type: none"> <li>Tracking clients lost to follow-up is not easy</li> <li>Records do not usually include mobile populations</li> <li>Cohort analyses can be complex</li> </ul>	<ul style="list-style-type: none"> <li>Set-up a standardized patient monitoring and reporting system according to WHO recommendations</li> </ul>
<b>Knowledge and Behavior among general population</b>	<ul style="list-style-type: none"> <li>Population-based surveys (BSS, KAP, DHS, MICS)</li> </ul>	<ul style="list-style-type: none"> <li>Self reporting biases</li> <li>Household surveys tend to under-sample MARP</li> <li>Conducted only every several years</li> </ul>	<ul style="list-style-type: none"> <li>Review timing of DHS and MICS scheduled in a country to plan when survey results will be available</li> </ul>
<b>Knowledge and Behavior among MARP</b>	<ul style="list-style-type: none"> <li>Special surveys of MARP in country</li> </ul>	<ul style="list-style-type: none"> <li>Difficult to find a representative sample</li> <li>Response biases</li> </ul>	<ul style="list-style-type: none"> <li>Plan for surveys targeting MARPs, especially in concentrated epidemics</li> <li>Refer to M&amp;E guide on MARP</li> </ul>
<b>National Commitment, policies and strategies</b>	<ul style="list-style-type: none"> <li>Questionnaire</li> <li>Key informant survey</li> </ul>	<ul style="list-style-type: none"> <li>Quality is not always captured</li> </ul>	<ul style="list-style-type: none"> <li>For composite indicators / indexes, adapt standardized questions</li> </ul>
<b>People trained in various areas related to HIV prevention, treatment and care and support</b>	<ul style="list-style-type: none"> <li>Training records</li> <li>Certification records</li> </ul>	<ul style="list-style-type: none"> <li>Training is not always standardized</li> <li>Those attending training may not be delivering the services</li> </ul>	<ul style="list-style-type: none"> <li>Countries may want to implement certification processes to ensure that those trained meet national minimum standards set on the training topic</li> </ul>



Area	Data Available	Limitations	Recommendations
<b>Coverage of various service provision (e.g. districts with services, number of facilities with services)</b>	<ul style="list-style-type: none"> <li>Ministry of Health reports</li> <li>Program reports</li> <li>Health facility surveys</li> <li>Facility accreditation records</li> <li>NGO records</li> </ul>	<ul style="list-style-type: none"> <li>Range in quality of services provided – some may be below standards</li> <li>May be difficult to capture services provision outside of the public sector</li> </ul>	<ul style="list-style-type: none"> <li>Adapt standardized definition of indicators which list criteria for health facilities to be considered suitable to provide a particular service</li> <li>Set-up a system in place to keep track of various providers of services within a district or country</li> </ul>
<b>Number of people reached by services</b>	<ul style="list-style-type: none"> <li>Routine health information system</li> <li>Client records / registers</li> <li>NGO records</li> </ul>	<ul style="list-style-type: none"> <li>May be difficult to capture service provision outside of the public sector</li> <li>Client registers or a system to maintain records must exist</li> </ul>	<ul style="list-style-type: none"> <li>Try to standardize data collection for various services so that information could be collated easily</li> </ul>
<b>TB/HIV services</b>	<ul style="list-style-type: none"> <li>Client records / registers</li> </ul>	<ul style="list-style-type: none"> <li>Current TB and HIV related registers may not capture this information</li> </ul>	<ul style="list-style-type: none"> <li>Registers may need to be modified to capture this information; if necessary, modify registers according to WHO recommendations</li> </ul>
<b>Cross-cutting indicator services where data is not easily extracted from existing registers</b>	<ul style="list-style-type: none"> <li>Client records / registers / special studies</li> </ul>	<ul style="list-style-type: none"> <li>Existing registers and reporting forms may not capture some of this information</li> </ul>	<ul style="list-style-type: none"> <li>Current practices and data collection forms should be reviewed to see how this information could be captured</li> <li>Referral links may need to be systematized and strengthened</li> </ul>
<b>Information on community-level programs and activities</b>	<ul style="list-style-type: none"> <li>Record-keeping forms</li> <li>Special surveys</li> </ul>	<ul style="list-style-type: none"> <li>May be difficult to capture service provision outside of the public sector</li> <li>Where multiple organizations are operating, different record keeping systems may be in place</li> </ul>	<ul style="list-style-type: none"> <li>Set-up a system in place to keep track of various providers of services within a district or country</li> <li>Partners working in communities may want to coordinate some basic data elements to be collected so that information can be collated and reported</li> </ul>
<b>Indicators related to Most-at-risk Populations – e.g. SW, IDU, migrant population, etc.</b>	<ul style="list-style-type: none"> <li>Special surveys and studies</li> <li>NGO records</li> </ul>	<ul style="list-style-type: none"> <li>Difficult to accurately measure the size of at-risk populations</li> <li>Due to their mobile nature, there is a need to be careful with duplication in counting and whether trends can be captured over time</li> </ul>	<ul style="list-style-type: none"> <li>Refer to recommendation in international guide on M&amp;E of most-at-risk populations</li> <li>Align reporting requirements among those working with specific populations and GFATM reporting needs</li> </ul>

## General resources

At WHO, the HIV/AIDS department (<http://www.who.int/hiv/en>) can provide a wide range of assistance, including the latest publications related to M&E in the health sector. In addition to guidelines and general resources in the area, the web site of the WHO HIV/AIDS department provides the latest information on WHO's 3 by 5 Initiative, including the most facts and figures.

Since the creation of the UNAIDS Secretariat, a number of M&E structures and resource groups – mainly at the global level – were established to improve coordination among key M&E players.

The M&E structures include:

- The UNAIDS Monitoring and Evaluation Unit – composed of UNAIDS Secretariat staff – assists in the development of generic M&E systems for strategic information sharing.
- The Strategic Information and Research Unit (SIR) of the HIV Department at WHO – that develops normative guidelines and provides country support in the areas of monitoring & evaluation, operational research, drug resistance, and policy.

The M&E resource groups include:

- The UNAIDS Monitoring and Evaluation Reference Group (MERG) – composed of co-sponsors/Secretariat M&E focal points, bilateral agencies, research institutes, and individual experts – assists in harmonizing M&E approaches and improving methods.
- The UNAIDS Estimates, Modeling and Projections Reference Group and UNAIDS/WHO working group on surveillance and estimates for HIV transmission and mortality.
- The Global Monitoring and Evaluation Support Team (GAMET) – composed of World Bank personnel and staff seconded from technical agencies – focuses on M&E country support in World Bank-supported countries.
- The Taskforce on M&E of HIV/AIDS – composed of representatives of WHO Departments involved with M&E, UNAIDS, and the Global Fund – periodically discusses and reviews issues related to the monitoring of HIV treatment and prevention scale up.

Members of the various resource groups have contributed to the development of the indicators presented in the toolkit.

At country level, UNAIDS Secretariat and partners have been encouraging national authorities to set up a national level M&E reference/support group to provide advice on national M&E strategies, and to assist in mobilizing resources for M&E and optimizing the use of data. Where those groups exist, coordination among partners has improved tremendously.

## Technical assistance

At UNAIDS, the Monitoring and Evaluation Unit is setting up a global system for technical assistance: the Monitoring and Evaluation Assistance System (METAT). Additional assistance can also be sought from the Evaluation Unit at the UNAIDS Secretariat for specific questions on the UNGASS Declaration of Commitment (UNGASS DoC) indicators at [UNGASSindicators@unaids.org](mailto:UNGASSindicators@unaids.org), or at [M-E@unaids.org](mailto:M-E@unaids.org) for general M&E questions.

Technical support to governments is available through the Strategic Information and Research (SIR) Unit of WHO's HIV/AIDS department (<http://www.who.int/hiv/strategic/en>) and M&E technical support groups in some countries. For specific questions related to the M&E of HIV/AIDS, in particular related to the scaling-up of ARV treatment assistance can be sought at [hivmoniteva@who.int](mailto:hivmoniteva@who.int).

Other sources of support for all the diseases include: the Emergency Plan: USAID, CDC, Measure Evaluation, Partners for Health Reform Plus (USA), Institute for Health Systems Development (UK). Further support for HIV/AIDS includes Measure DHS, Family Health International, and The Synergy Project. Many countries now have UNAIDS M&E Field Officers or US Government Strategic Information and Monitoring and Evaluation Field Officers (see website [www.globalHIVEvaluation.org](http://www.globalHIVEvaluation.org)).

## Software products

UNAIDS has developed a useful tool for countries – the *Country Response Information System* (CRIS) – that has the potential to house all national data obtained on core and additional indicators and generate reports on the indicators. The CRIS includes two additional functions: resource tracking and research inventory.

To learn more about the process of indicator development and the suggested actions to implement the UNGASS DoC M&E framework, readers are encouraged to consult the *Guidelines on Construction of Core Indicators* that exist in four languages (English, French, Spanish and Russian) and which can be downloaded from the UNAIDS web site. More information on the CRIS, can also be found on the UNAIDS web site.

## Guidelines and essential references

The major sources for guidelines cited below are UNAIDS, WHO, UNICEF, Emergency Plan, USAID, CDC, MEASURE Evaluation and FHI, and some of their partners.

Upcoming M&E Guidelines from WHO and partners, in addition to those below, will address Testing and Counseling (voluntary), Most-At-Risk-Populations (MARPs) and monitoring tools related to home-based care as well as paediatric considerations for some of the existing guides and indicators will be proposed.

Versions of the various guidelines may be found on the Internet in the UNAIDS M&E library at:

[http://www.unaids.org/EN/in+focus/monitoringevaluation/m\\_e+library.asp](http://www.unaids.org/EN/in+focus/monitoringevaluation/m_e+library.asp)

Alternatively, readers may also want to access the following partner sites for more detailed information in specific areas:

<http://www.who.int>

<http://www.unicef.org>

<http://www.child.orgp>

<http://www.cpc.unc.edu/measure>

<http://www.fhi.org>

<http://www.cdc.gov>

<http://www.globalHIVevaluation.org>

Centers for Disease Control and Prevention (2002). *Strategic Monitoring and Evaluation: A Draft Planning Guide and Related Tools for CDC GAP Country Programs*. Centers for Disease Control and Prevention, Atlanta. (no URL available).

Family Health International (2002). *Evaluating Programs for HIV/AIDS Prevention and Care in Developing Countries: A Handbook for Program Managers and Decision Makers*. Family Health International, Arlington.  
<http://www.fhi.org/en/hivaids/pub/archive/evalchap/index.htm>

Family Health International (2000). *Behavioral Surveillance Surveys (BSS): Guidelines for Repeated Behavioral Surveys in Populations at Risk for HIV*. Family Health International, Arlington.  
<http://www.fhi.org/en/topics/bss.htm>

UNAIDS (2005). *Monitoring the Declaration of Commitment on HIV/AIDS Guidelines on the construction of core indicators*  
[http://www.unaids.org/html/pub/Publications/IRC-pub02/JC894-CoreIndicators\\_en.pdf.pdf](http://www.unaids.org/html/pub/Publications/IRC-pub02/JC894-CoreIndicators_en.pdf.pdf)

UNAIDS/UNICEF (2005) Guide to Monitoring and Evaluation of the National Response for Children Orphaned and Made Vulnerable by HIV/AIDS.

UNAIDS/MEASURE (2000). *National AIDS Programs: A Guide to Monitoring and Evaluation*. UNAIDS, Geneva.  
<http://www.cpc.unc.edu/measure>

USAID/UNAIDS/WHO/Policy Project (2003). *The Level of Effort in the National Response to HIV/AIDS: The AIDS Program Effort Index (API) 2003 Round*.

USAID/UNAIDS/WHO/CDC/Policy Project (2004). *Coverage for Selected Services for HIV/AIDS Prevention and Care in Low and Middle Income Countries in 2003*

UNAIDS/World Bank (2002). *National AIDS Councils (NACs) Monitoring and Evaluation Operations Manual*. UNAIDS/World Bank, Geneva. <http://www.worldbank.org>

WHO (2003). The Monitoring and Evaluation (M&E) of the 3 by 5 Initiative. WHO, Geneva. <http://www.who.int/3by5/publications/briefs/monitoring/en>

WHO (2003). Guidelines for surveillance of HIV drug resistance. WHO, Geneva. <http://www.who.int/3by5/publications/documents/hivdrugsurveillance/en>

WHO (2003). Integrated Management of Adolescent and Adult Illness (IMAI) modules. WHO, Geneva.

WHO (2003). Monitoring and evaluating of national ARV programs in the rapid scale-up to 3 by 5. WHO, Geneva. <http://www.who.int/3by5/publications/documents/artindicators/en>

WHO/UNAIDS (2004). *National AIDS Programs: A guide to monitoring and evaluating HIV/AIDS care and support*. WHO, Geneva. <http://www.who.int/hiv/pub/epidemiology/pubnapcs/en>

WHO/UNAIDS (2000). *Second Generation Surveillance for HIV: The Next Decade*. UNAIDS, Geneva. [http://www.who.int/hiv/pub/surveillance/en/cds\\_edc\\_2000\\_5.pdf](http://www.who.int/hiv/pub/surveillance/en/cds_edc_2000_5.pdf)

WHO/UNAIDS/Measure DHS/The World Bank/ UNICEF/UNESCO/FHI/USAID. (2004) Guide to Monitoring and Evaluating National HIV/AIDS Prevention Programs for Young People (10 to 24 years old). WHO, Geneva. [http://www.who.int/hiv/pub/me/en/me\\_prev\\_intro.pdf](http://www.who.int/hiv/pub/me/en/me_prev_intro.pdf)

WHO/UNAIDS/USAID/UNICEF/CDC/UNFPA (2004). National Guide to Monitoring and Evaluating Programs for the Prevention of HIV in Infants and Young Children. WHO, Geneva.

WHO/UNAIDS/GFATM/USAID/MEASURE Evaluation/FHI (2005). National AIDS Programs- A guide to indicators for monitoring and evaluation national antiretroviral programs. WHO, Geneva. [http://www.who.int/hiv/pub/prev\\_care/youngchildren/en/](http://www.who.int/hiv/pub/prev_care/youngchildren/en/)

Data for some of these indicators are available at [www.measuredhs.com/hivdata/](http://www.measuredhs.com/hivdata/)

UNAIDS/USAID/UNICEF/CDC/WHO Draft to be published in 2006. Guide to Monitoring and Evaluating HIV prevention programs for Most-at-risk Populations in low-level and concentrated settings.

WHO (2004). Guide to monitoring and evaluation for collaborative TB/HIV activities. (WHO/HTM/TB/2004.342) [http://www.who.int/hiv/pub/prev\\_care/tb\\_hiv/en/](http://www.who.int/hiv/pub/prev_care/tb_hiv/en/)

**ANNEX A:**  
**Description of HIV/AIDS Indicators**



## PREVENTION INDICATOR (HIV-PI 1):

### BEHAVIOUR CHANGE COMMUNICATION Provision of life-skills-based HIV/AIDS education in schools

Percentage of schools with at least one teacher who has been trained in participatory life-skills-based HIV/AIDS education and who taught it during the last academic year.

#### RATIONALE

This indicator is a measure of the progress in implementing life-skills-based HIV/AIDS education in schools. It is a measure of coverage by schools – that is, estimating the proportion of schools that report having such programs. It is not a measure of the quality of such programs. For this indicator to be most meaningful, it should be combined with measures of quality.

#### DEFINITION OF INDICATOR

**Numerator:** Number of schools with at least one teacher trained in, and regularly teaching, life-skills-based HIV/AIDS education

**Denominator:** Number of schools

**Note:** The target population for this indicator is primary and secondary schools.

Principals/heads of a nationally representative sample of schools (to include both private and public schools, and primary and secondary schools) are briefed on the meaning of life-skills-based HIV/AIDS education and are then asked the following questions:

1. Does your school have at least one qualified teacher who has been trained in participatory life-skills-based HIV/AIDS education in the last five years?
2. If the answer to question 1 is “yes”: Did this person teach life-skills-based HIV/AIDS education on a regular basis in your school *throughout* the last academic year? (“*throughout*” meaning at least 5–15 hours of life-skills-based HIV/AIDS education programming per year per grade of pupil)

A **qualified teacher** is one that has participated in, and successfully completed, a training course focusing on the skills required to conduct participatory learning experiences that aim to develop knowledge, positive attitudes and skills (e.g., interpersonal communication, negotiation, decision-making and critical-thinking skills and coping strategies) that assist young people in maintaining safe lifestyles.

The criteria of **teaching on a regular basis** is grounded in research findings that show that high-quality programs can produce good outcomes with five to 15 hours of life-skills-based HIV/AIDS education programming per year per grade of pupil.

The time dimension of **the last academic year** will be, in each country, defined according to the educational calendar (usually nine to 10 months within one calendar year, designed to allow students to complete one educational level, or grade).

If the sample was selected to represent different strata, the results can be disaggregated by school type (i.e., female and male, large and small, urban and rural, private or public, and primary or secondary). Where a school is both primary and secondary, information should be collected and reported separately for each level.

In addition, primary and secondary school attendance rates for the most recent academic year available should be stated.

Resources permitting, the following additional four questions can also be included (in the case of the answer to question 1 above being “yes”):





3. How many teachers at your school have received training in participatory life-skills-based HIV/AIDS education in the last five years?
4. How many of these teachers taught life-skills-based HIV/AIDS education program in your school during the last academic year?
5. How many classes and students in each grade in your school received life-skills-based HIV/AIDS education last year?
6. How long was the program/course for each grade in hours?

With information on the overall school-age population and on the above questions, it is possible to estimate the proportion of all young people, as well as the proportion of school-going young people, who actually receive life-skills-based HIV/AIDS education.

For a guide to **quality** aspects of a life-skills-based HIV/AIDS education, refer to UNICEF website: [www.unicef.org/lifeskills/](http://www.unicef.org/lifeskills/)

**Platform:** School-based survey

**Frequency:** Biennial

## REFERENCES

- WHO-UNAIDS (2004) *Guide to Monitoring and Evaluating National HIV/AIDS Prevention Programs for Young People*. Geneva. [www.who.int/hiv/pub/epidemiologu/me\\_prev\\_yp/en](http://www.who.int/hiv/pub/epidemiologu/me_prev_yp/en)

## PREVENTION INDICATOR (HIV-PI 2):

### BEHAVIOUR CHANGE COMMUNICATION Most-at-risk populations: prevention programs

Percentage of [most-at-risk population(s)] reached with HIV/AIDS prevention programs.

#### RATIONALE

Most-at-risk populations are often difficult to reach with HIV/AIDS prevention programs. However, in order to prevent the spread of HIV/AIDS among these populations as well as into the general population, it is important that they access these services. This indicator is to assess progress in implementing HIV/AIDS prevention programs for most-at-risk populations and should be calculated separately for each population that is considered most-at-risk in a given country, e.g., sex workers, injecting drug users, men who have sex with men.

Note: Countries with generalized epidemics may also have a concentrated sub-epidemic among one or more most-at-risk populations. If so, it would be valuable for them to calculate and report on this indicator for those populations.

#### DEFINITION OF INDICATOR

**Numerator:** Number of [most-at-risk population] respondents who have accessed HIV/AIDS prevention programs during the last 12 months

**Denominator:** Number of most-at-risk population included in the survey sample or prevalence estimation methods for the size of the most-at-risk population for the denominator (if the data is being collected through program monitoring records)

**Note:** Data collected for this indicator should be disaggregated by gender and age (<25/25+).

Whenever possible, data for most-at-risk populations should be collected through civil society organizations that have worked closely with this population in the field.

Access to survey respondents as well as the data collected from them must remain confidential.

#### MEASUREMENT

The data can be collected through special surveys and program monitoring records.

Surveys: Respondents are asked a series of questions about the exposure/use of key HIV prevention services. Depending on local contexts, the list would include (1) outreach and peer education; (2) exposure to targeted mass media; (3) STI screening and/or treatment; (4) HIV counseling and testing; (5) substitution therapy and safer injection practices for IDU.

Accessing and/or surveying most-at-risk populations can be challenging. Consequently, data obtained may not be based on a representative sample of the national most-at-risk population being surveyed. If there are concerns that the data is not based on a representative sample, these concerns should be reflected in the interpretation of the survey data. Where different sources of data exist, the best available estimate should be used. Information on the sample size, the quality/reliability of the data and any related issues should be included in the report submitted with this indicator.

Program monitoring: records of programs providing the above-mentioned services are compiled and aggregated to obtain an overall measure of the reach of prevention programs.

When the indicator is based on program data, an attempt to address the issue of double counting during the reference period should be made. There is a need to ensure that clients served (as opposed to clients-visits) for the same service or across services are counted.

Different types of services will all count the same in estimating overall service coverage.



**Platform:** The data can be collected through special surveys and program monitoring records

**Frequency:** Biennial

## REFERENCES

- *UNAIDS (2005) Monitoring the Declaration of Commitment on HIV/AIDS: Guidelines on construction of core indicators-2006 reporting, UNGASS, Geneva*
- *WHO-UNAIDS (2005) A guide to monitoring and evaluating national HIV prevention programs for most-at-risk populations in low-level and concentrated epidemic settings (draft)*

## PREVENTION INDICATOR (HIV-PI 3):

### BEHAVIOR CHANGE COMMUNICATION Knowledge of HIV prevention among young people

Percentage of young people who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV.

#### RATIONALE

This indicator combines the measures of knowledge of HIV transmission and prevention with the prevalence of most common misconceptions about HIV.

#### DEFINITION OF INDICATOR

**Numerator:** Number of young men and young women who gave correct answers to all five questions relating to transmission of HIV and misconceptions about HIV

**Denominator:** All young men and young women surveyed

**Note:** Analysis and reporting in percentage broken down by males and females according to urban/rural residence.

#### MEASUREMENT

This indicator is constructed from responses to the following set of prompted questions:

1. Can the risk of HIV transmission be reduced by having sex with only one faithful, uninfected partner?
2. Can the risk of HIV transmission be reduced by using condoms?
3. Can a healthy-looking person have HIV infection?
4. Can a person get HIV infection from mosquito bites?
5. Can a person get HIV infection by sharing a meal with someone who is infected?

Items 4 and 5 may be replaced with the two most common local (national) misconceptions about HIV transmission or prevention. For example, “Can HIV in an infected man be cured if he has sex with a virgin girl?” or “Can people get HIV by getting injections with a needle that was already used by someone else?”

Items 1 and 2 measure the correct knowledge for preventing HIV transmission. Item 3 measures a common misconception that healthy-looking people do not have HIV infection. This is a widespread misconception among young people, and it can result in unprotected sex with an infected partner. Items 4 and 5 refer to two other misconceptions about HIV transmission.

Together the indicator provides program managers with a measure of the overall knowledge that young people have about avoiding HIV. Previous knowledge indicators have included abstinence as a “correct” method of prevention used in this indicator. Abstinence is an extremely important prevention option for young people.

Research in many settings shows that already sexually active people rarely use abstinence as a primary HIV-prevention method. However, young people in particular may be practicing “secondary abstinence” – that is, a prolonged voluntary period of sexual inactivity following sexual initiation. Negative responses on this item may therefore result from people believing that abstinence is not feasible, rather than from belief that abstinence does not provide effective protection. In surveys among adolescents, however, questions about abstinence continue to be important. Programs focusing on delaying age at first sex among adolescents (ages 10–19) may choose to add a knowledge indicator that includes correct responses to a question about abstinence as a prevention method in the numerator. A suggested question on abstinence might be: “Can the risk of HIV transmission be reduced by abstaining from sexual intercourse?”



This indicator should be presented as a percentage separately for men and women, disaggregated by age in the following groups: 10–14 (if available) 15–19, 20–24, 15–24, and 10–24 (again, if available). This indicator should be reported for the 15–24 age group for the Millennium Development Goal and the UNGASS HIV Goal indicators.

The indicator can also be disaggregated by question to show gaps in knowledge and prevalence of misconceptions.

**Platform:** Nationally representative general population survey

**Frequency:** Every 2–4 years

## REFERENCES

- WHO-UNAIDS (2004) *Guide to Monitoring and Evaluating National HIV/AIDS Prevention Programs for Young People*. Geneva. [www.who.int/hiv/pub/epidemiology/me\\_prev\\_yp/en](http://www.who.int/hiv/pub/epidemiology/me_prev_yp/en)
- UNAIDS (2005) *Monitoring the Declaration of Commitment on HIV/AIDS: Guidelines on construction of core indicators-2006 reporting*, UNGASS, Geneva

## PREVENTION INDICATOR (HIV-PI 4):

### CONDOM DISTRIBUTION

#### Retail outlets and service delivery points with condoms in stock

The proportion of randomly-selected retail outlets and service delivery points that have condoms in stock at the time of a survey, of all retail outlets and service delivery points selected for survey.

#### RATIONALE

This indicator reflects the success of attempts to broaden the distribution of condoms so that they are more widely available to people at locations and times when people are likely to need them. It measures actual distribution of condoms at designated points at any one point in time.

#### DEFINITION OF INDICATOR

**Numerator:** Number of retail outlets and service delivery points that have condoms in stock at the time of a survey

**Denominator:** Total number of retail outlets and service delivery points that have been selected for the survey

**Note:** Sites in both urban and rural areas should be selected.

#### MEASUREMENT

A number of sites of different types (i.e. pharmacies, clinics, bars and clubs) are randomly selected for a retail survey from a standard checklist of venues where condoms should be accessible, including bars and nightclubs, different classes of retail shops, STI clinics and other service provision points. While the indicator gives a single summary figure, the data can also be disaggregated by outlet type.

**Platform:** Retail surveys (PSI protocol to evaluate social marketing programs, WHO/GPA prevention indicator 3)

**Frequency:** Quarterly/annually

#### REFERENCES

- UNAIDS/MEASURE (2000) *National AIDS Programs: A guide to monitoring and evaluation*. Geneva: UNAIDS. [www.cpc.unc.edu/measure/guide/guide.html](http://www.cpc.unc.edu/measure/guide/guide.html)

## PREVENTION INDICATOR (HIV-PI 5):

### TESTING AND COUNSELING People receiving counseling and testing

The percentage of the general population receiving an HIV test, the results, and post-test counseling.

#### RATIONALE

HIV testing and counseling are important entry points for prevention and care needs. It is therefore important to measure the number of people who access these services, as an indicator of the number of people who could potentially benefit from prevention and care.

This indicator is designed to show how many people have been tested and received post-test counseling services.

For the program manager, this indicator would be a cascade that would be able to identify the following:

1. Number of individuals who received pre-test counseling and/or pre-test information sufficient to ensure informed consent
2. Percent of those tested who received pre-test counseling and actually tested
3. Percent of those tested who received their results
4. Percent of those tested who received post-test counseling

#### DEFINITION OF INDICATOR

**Numerator:** The number of people who have received HIV test results and post-test counseling

**Denominator:** Number of people surveyed or total population, depending on method of data collection

**Note:** Analysis and reporting by component and gender is recommended. It is suggested that data also be collected on those requesting an HIV test, receiving the test and receiving their results. It is also recommended that data be disaggregated for those under 25 as follows: 15-19 and 20-24.

#### MEASUREMENT

The following methodologies are recommended:

1. Household survey: By asking respondents whether they have ever been tested and if so whether they have received the results. This indicator can be captured in a nationally-representative manner.
2. Health Management Information Systems (HMIS): Ideally, information for this indicator can be collected by reviewing data collected at the local level(s) and available through the HMIS at the national level.
3. Health Facility Survey.

Where HMIS are not fully operational, the use of health facility surveys with a testing and counseling component in all relevant units/departments may be necessary.

It is necessary to stratify the indicator by how these services are delivered. Specifically, whether by integrated (i.e. testing for diagnostic purposes) or vertical (i.e. stand alone VCT) service delivery.

The denominator, total population, can be obtained from the latest census data.

**Platform:** UNAIDS general population survey; DHS AIDS module; FHI adult BSS; youth BSS

**Frequency:** Annually



## REFERENCES

- UNAIDS/MEASURE (2000) *National AIDS Programs: A guide to monitoring and evaluation*. Geneva: UNAIDS.  
[www.cpc.unc.edu/measure/guide/guide.html](http://www.cpc.unc.edu/measure/guide/guide.html)
- UNAIDS-WHO (2004) *National AIDS Programs. A guide to monitoring and evaluating HIV/AIDS care and support*. Geneva: UNAIDS



## PREVENTION INDICATOR (HIV-PI 6):

### PREVENTION OF MOTHER TO CHILD TRANSMISSION Health facilities offering minimum package of PMTCT

The percentage of public, missionary, and workplace venues (family planning and primary health care clinics, ANC/MCH, and maternity hospitals) offering the minimum package of services to prevent HIV infection in infants and young children in the past 12 months.

#### RATIONALE

This indicator provides critical information on the national availability of prevention and care efforts for women and infants. It is useful to program planners in determining where services may be needed, or where facilities are providing the full spectrum of services to prevent HIV infection in women and infants.

#### DEFINITION OF INDICATOR

**Numerator:** Number of public, missionary, and workplace venues (family planning and primary health care clinics, ANC/MCH, and maternity hospitals) offering the minimum package of services to prevent HIV infection in infants and young children in the past 12 months

**Denominator:** All public, missionary, and workplace venues (family planning and primary health care clinics, ANC/MCH, and maternity hospitals)

**Note:** Analysis and reporting by type of service is recommended.

#### MEASUREMENT

The information required for this indicator can be collected through a variety of different methods, and depends on resource availability as well as the amount of detail sought. It focuses on the minimum package of services which is defined by the type of clinical setting (see reference below). One option is to send a questionnaire to all public, missionary and workplace health facilities offering family planning and primary health care clinics, ANC/MCH, and maternity services. Another way to collect the relevant information is by adapting other instruments that already exist.

**Platform:** Health facility surveys

**Frequency:** Every 2-3 years

#### REFERENCES

- UNAIDS-WHO (2004) *National guide to monitoring and evaluating programs for the prevention of HIV in infants and young children*. Geneva

## PREVENTION INDICATOR (HIV-PI 7):

### PREVENTION OF MOTHER TO CHILD TRANSMISSION HIV-infected pregnant women receiving a complete course of antiretroviral prophylaxis to reduce the risk of mother to child transmission (MTCT)

Percentage of HIV-positive pregnant women receiving a complete course of ARV prophylaxis to reduce MTCT in accordance with nationally approved treatment protocol (or WHO/UNAIDS standards) in last 12 months.

#### RATIONALE

This indicator assesses the progress in preventing mother-to-child HIV transmission through the provision of ARV prophylaxis.

#### DEFINITION OF INDICATOR

**Numerator:** Number of HIV-positive pregnant women receiving a complete course of ARV prophylaxis to reduce the likelihood of MTCT in accordance with nationally approved treatment protocol (or WHO/UNAIDS standards) in last 12 months

**Denominator:** Estimated number of HIV-infected pregnant women giving birth in last 12 months

**Note:** Breakdown by type of service is recommended and if possible by women by age group: 15-19, 20-24, 25-34, 35-49.

#### MEASUREMENT

The number of HIV-infected pregnant women provided with antiretroviral prophylaxis to reduce the risk of MTCT in the last 12 months is obtained from program monitoring records. Only those women who completed the full course should be included. The number of HIV-infected pregnant women to whom antiretroviral prophylaxis to reduce the risk of MTCT *could potentially have been given* is estimated by multiplying the total number of women who gave birth in the last 12 months (Central Statistics Office estimates of births) by the most recent national estimate of HIV prevalence in pregnant women (HIV sentinel surveillance antenatal clinic estimates).

**Platform:** Program monitoring records / Central Statistics Office estimates of births

**Frequency:** Every 2-3 years

#### REFERENCES

- UNAIDS-WHO (2004) *National guide to monitoring and evaluating programs for the prevention of HIV in infants and young children*, Geneva
- UNAIDS (2005) *Monitoring the Declaration of Commitment on HIV/AIDS: Guidelines on construction of core indicators-2006 reporting*, UNGASS, Geneva

## PREVENTION INDICATOR (HIV-PI 8):

### SEXUALLY TRANSMITTED INFECTION (STI) DIAGNOSIS AND TREATMENT STI comprehensive case management

Percentage of patients with STIs at health care facilities who are appropriately diagnosed, treated and counseled.

#### RATIONALE

The availability and utilization of services to treat and contain the spread of STIs can reduce the rate of HIV transmission within a population. One of the cornerstones of STI control is comprehensive case management of patients with symptomatic STIs. This composite indicator reflects the competence of health service providers to appropriately provide these services, and the quality of services provided.

#### DEFINITION OF INDICATOR

**Numerator:** Number of STI patients for whom the correct procedures were followed on: (1) history taking; (2) examination; (3) diagnosis and treatment; and (4) effective counseling on partner notification, condom use and HIV testing

**Denominator:** Number of STI patients for whom provider-client interactions were observed

**Note:** Disaggregation by gender and for patients under and over 25 years of age is recommended. Ideally, ages under 25 would be disaggregated as follows: 15-19 and 20-24.

Scores for each component of the indicator (i.e., history taking, examination, diagnosis and treatment, and counseling) must be reported as well as the overall indicator score.

#### MEASUREMENT

Data are collected in observations of provider-client interaction at a sample of health care facilities offering STI services. Providers are assessed on history taking, examination, proper diagnosis and treatment of patients, and effective counseling, including counseling on partner notification, condom use and HIV testing. "Appropriate" diagnosis and treatment and counseling procedures in any given country are those specified in national STI service guidelines.

**Platform:** Health facility survey – based on WHO/UNAIDS revised guidelines on evaluating STI services and/or MEASURE service provision assessment (SPA)

**Frequency:** Biennial

#### REFERENCES

- *UNAIDS (2005) Monitoring the Declaration of Commitment on HIV/AIDS: Guidelines on construction of core indicators-2006 reporting, UNGASS, Geneva*

## PREVENTION INDICATOR (HIV-PI 9):

### BLOOD SAFETY AND UNIVERSAL PRECAUTIONS Districts with access to donor recruitment and blood transfusion

Percent of districts or regions with access to blood transfusion services which do not pay blood donors, and do not recruit donors from among relatives of the patient.

#### RATIONALE

Many countries working to improve access to safe blood have established blood transfusion services including blood banks at the regional or district level, and are working systematically to enhance the recruitment of voluntary donors as well as reducing or eliminating reliance on blood donations from relatives and paid donors. This indicator assesses to what extent this has been implemented at the level dictated by national policy.

#### DEFINITION OF INDICATOR

**Numerator:** Number of districts or regions with access to blood transfusion services which do not pay blood donors, and do not recruit donors from among relatives of the patient

**Denominator:** Total number of districts or regions

#### MEASUREMENT

A district or region is considered to score positively on this indicator if at least 95 percent of blood transfused is supplied by a regional or provincial blood transfusion service that screens donors for risk behaviors and excludes donations from relatives and paid donors.

**Platform:** MEASURE Evaluation Draft Blood Safety Protocol

**Frequency:** Quarterly

#### REFERENCES

- UNAIDS/MEASURE (2000) *National AIDS Programs: A guide to monitoring and evaluation*. Geneva: UNAIDS. [www.cpc.unc.edu/measure/guide/guide.html](http://www.cpc.unc.edu/measure/guide/guide.html)

## PREVENTION INDICATOR (HIV-PI 10):

### BLOOD SAFETY AND UNIVERSAL PRECAUTIONS

#### Transfused blood units screened for HIV

The percentage of blood units transfused in the last 12 months that have been adequately screened for HIV according to national or WHO guidelines.

#### RATIONALE

Blood safety programs aim to ensure that the overwhelming majority (ideally 100 percent) of blood units are screened for HIV, and those that are included in the national blood supply are indeed uninfected. This indicator gives an idea of the overall percentage of blood units that have been screened to sufficiently high standards that can be confidently declared as HIV free.

#### DEFINITION OF INDICATOR

**Numerator:** Number of blood units screened for HIV in the previous 12 months, and among those, the number screened up to WHO or national standards

**Denominator:** Total number of blood units transfused in the previous 12 months

**Note:** Breakdown by components of the indicator is recommended.

#### MEASUREMENT

The number of units transfused and the number screened for HIV should be available from health information systems. Quality of screening may be determined from a special study that re-tests a sample of blood previously screened, or from an assessment of the conditions under which screening occurred. In situations where this approach is not feasible, data on the percentage of facilities with good screening and transfusion records and no stockouts of test kits may be used to estimate adequately screened blood for this indicator.

**Platform:** MEASURE Evaluation Draft Blood Safety Protocol

**Frequency:** Every 2-3 years

#### REFERENCES

- UNAIDS/MEASURE (2000) *National AIDS Programs: A guide to monitoring and evaluation*. Geneva: UNAIDS. [www.cpc.unc.edu/measure/guide/guide.html](http://www.cpc.unc.edu/measure/guide/guide.html)
- UNAIDS (2005) *Monitoring the Declaration of Commitment on HIV/AIDS: Guidelines on construction of core indicators-2006 reporting*, UNGASS, Geneva

## TREATMENT INDICATOR (HIV-TI 1):

### ANTIRETROVIRAL TREATMENT AND MONITORING

#### People with advanced HIV infection receiving antiretroviral combination therapy

Percentage of people with advanced HIV infection receiving antiretroviral combination therapy.

#### RATIONALE

As the HIV pandemic matures, increasing numbers of people are reaching advanced stages of HIV infection. Antiretroviral combination therapy has been shown to reduce mortality amongst those infected and efforts are being made to make it more affordable even within less-developed countries. Antiretroviral combination therapy should be provided in conjunction with broader care and support services including counseling for family caregiver.

#### DEFINITION OF INDICATOR

**Numerator:** Number of people with advanced HIV infection who receive antiretroviral combination treatment according to the nationally approved treatment protocol (or WHO/UNAIDS standards)

**Denominator:** Number of people with advanced HIV infection

**Note:** This indicator should be disaggregated by public/private services and by age group and gender. Age groups should be 0-2, 3-4, 5-9, 10-14, 15-34, 35-49, 50+.

#### MEASUREMENT

The numerator of this indicator consists of the number of people receiving treatment at start of year plus the number of people who commenced treatment in the last 12 months minus the number of people for whom treatment was terminated in the last 12 months (including those who died). The number of people with advanced HIV infection is assumed to be 15 percent of the total number of people currently infected (for the purposes of this indicator). The latter is estimated using the most recent national sentinel surveillance data. The start and end dates of the period for which the number of people are given antiretroviral therapy should be stated. Overlaps between reporting periods should be avoided wherever possible.

**Platform:** Program monitoring records

**Frequency:** Biennial

#### REFERENCES

- UNAIDS-WHO (2004) *National AIDS Programs: A guide to indicators for monitoring and evaluating national antiretroviral programs*, Geneva
- UNAIDS (2005) *Monitoring the Declaration of Commitment on HIV/AIDS: Guidelines on construction of core indicators-2006 reporting*, UNGASS, Geneva

## TREATMENT INDICATOR (HIV-TI 2):

### ANTIRETROVIRAL TREATMENT AND MONITORING

#### Health facilities capable of providing advanced HIV clinical care and psychosocial support services for HIV-infected persons

Percentage of health facilities that have the capacity and conditions to provide advanced HIV/AIDS clinical care and psychosocial support services, including providing and monitoring antiretroviral combination therapy.

#### RATIONALE

This indicator measures the availability of advanced services specific to people living with HIV/AIDS. It is assumed that the services and items measured in this indicator require substantial input and personnel training beyond what is routine for most health systems.

The ability to provide advanced HIV/AIDS care is defined as:

- (a) systems and items to support the management of opportunistic infections and the provision of palliative care (symptomatic treatment) for the advanced care of people living with HIV/AIDS;
- (b) systems and items to support advanced services for the care of people living with HIV/AIDS;
- (c) systems and items to support antiretroviral combination therapy;
- (d) conditions to provide advanced inpatient care for people living with HIV/AIDS;
- (e) conditions to support home care services; and
- (f) post exposure prophylaxis.

#### DEFINITION OF INDICATOR

##### **Numerator:**

1. Number of facilities at which the individual items for each service or item listed above exist
2. Number of facilities at which all components for each individual service or item (a, b, c, d, e **or** f) exist
3. Number of facilities at which all components for all individual services and items (a, b, c, d, e **and** f) exist

##### **Denominator:**

For 1: the total number of health facilities surveyed

For 2 and 3: the total number of health facilities at which HIV/AIDS services in each of the areas identified in the definition are offered or relevant

#### MEASUREMENT

This information should be collected through a health facility survey with observation in all relevant service areas. Like core indicator 6, interviews of HIV/AIDS service providers would also be needed.

The specific items for each service should be presented individually and at a first level of aggregation (all components of each service or item). When a reasonable proportion of facilities begin to have all first-level aggregated components, a second-level aggregation can be presented when appropriate.

**Platform:** Health facility surveys

**Frequency:** Every 2-4 years

#### REFERENCES

- UNAIDS (2004) *National AIDS Programs. A guide to monitoring and evaluating HIV/AIDS care and support*. Geneva: UNAIDS

## CARE AND SUPPORT (HIV-CS 1):

### SUPPORT FOR ORPHANS

#### Orphans and other children made vulnerable by HIV/AIDS whose households received free basic external support

Percentage of orphans and vulnerable children whose households received free basic external support in caring for the child.

#### RATIONALE

This indicator measures support coming from a source other than friends, family or neighbors (unless they are working for a community-based group or organization) given free of user charges to households with orphans and vulnerable children.

#### DEFINITION OF INDICATOR

**Numerator:** Number of orphans and vulnerable children residing in households that received at least one of the following services for the child:

- medical care support within the past 12 months;
- emotional support within the past 3 months;
- school-related assistance within the past 12 months; and
- other social support, including material support, within the past 3 months.

**Denominator:** Total number of orphans and vulnerable children

**Note:** If sample sizes permit, data should be analyzed and reported by age (0–5, 6–9, and 10–17 years) and by sex.

#### MEASUREMENT

As part of a household survey, household rosters can be used to identify all eligible orphans and vulnerable children (under 18 years of age). For each household with orphans and vulnerable children, a series of questions is asked about the **types** and **frequency** of support received and the primary source of the help. This survey tool may also be used in low-prevalence settings or targeted populations with similar but adapted methods.

**Platform:** Household surveys

**Frequency:** Every 2–4 years

#### REFERENCES

- UNAIDS/UNICEF (2005). *Guide to monitoring and evaluation of the national response for children orphaned and made vulnerable by HIV/AIDS*. New York: UNICEF. [www.unaids.org/EN/in+focus/monitoringevaluation/m\\_e+library.asp](http://www.unaids.org/EN/in+focus/monitoringevaluation/m_e+library.asp)
- UNAIDS-WHO (2004) *National AIDS Programs. A guide to monitoring and evaluating HIV/AIDS care and support*. Geneva: UNAIDS [www.unaids.org/EN/in+focus/monitoringevaluation/m\\_e+library.asp](http://www.unaids.org/EN/in+focus/monitoringevaluation/m_e+library.asp)
- UNAIDS (2005) *Monitoring the Declaration of Commitment on HIV/AIDS: Guidelines on construction of core indicators-2006 reporting*, UNGASS, Geneva



## SUPPORTIVE ENVIRONMENT (HIV-SE 1):

### WORKPLACE POLICY

#### Companies with HIV/AIDS workplace policies and programs

Percentage of large enterprises/companies which have HIV/AIDS workplace policies and programs.

#### RATIONALE

The workplace is often a highly convenient and conducive setting for HIV control activities and workplace-based interventions have been proven to be effective. The indicator is useful even in countries where HIV prevalence is low because early action in educating workers on HIV prevention is essential if the serious economic and social consequences of HIV/AIDS are to be avoided.

#### DEFINITION OF INDICATOR

**Numerator:** Number of employers with HIV/AIDS policies and regulations that meet all criteria

**Denominator:** Number of employers surveyed

**Note:** Analysis and reporting both individually by private/public sectors and by both combined is recommended

#### MEASUREMENT

Private sector employers are selected on the basis of the size of the labor force. Public sector employers should be the ministries of transport, labor, tourism, education and health. Employers are asked to state whether they are currently implementing personnel policies and procedures that cover a minimum of specified aspects (see reference for details). Copies of written personnel policies and regulations should be obtained and assessed wherever possible.

**Platform:** Survey of the 30 largest employers – 25 private sector; 5 public sector

**Frequency:** Biennial

#### REFERENCES

- UNAIDS (2005) *Monitoring the Declaration of Commitment on HIV/AIDS: Guidelines on construction of core indicators-2006 reporting*. UNGASS, Geneva

## HIV OUTCOME INDICATOR (HIV-OI 1):

### MULTIPLE PARTNERS

**Women and men aged 15-49 who had sex with more than one partner in the last twelve months**

Percentage of women and men aged 15-49 who had sex with more than one partner in the last twelve months, of all people surveyed aged 15-49 who report being sexually active in the last twelve months.

#### RATIONALE

Prevention messages should focus on abstinence and mutual monogamy. As sexual relationships among young people are frequently unstable, relationships that were intended to be mutually monogamous may break up and be replaced by other relationships in which similar intentions prevail. Particularly in high HIV prevalence epidemics, serial monogamy is not greatly protective against HIV infection. This indicator measures the proportion of people that have been exposed to more than one partner in the last twelve months.

#### DEFINITION OF INDICATOR

**Numerator:** Number of women and men aged 15-49 who have had sexual intercourse with more than one partner in the last twelve months

**Denominator:** Number of women and men aged 15-49 who report being sexually active in the last twelve months

#### MEASUREMENT

In a survey among people aged 15-49, respondents are asked about their sexual partnerships in the last twelve months.

The indicator should be reported separately for men and women. It should also be constructed separately for those aged 15-19 and 20-24, 15-24 and 15-49 if sample size allows.

To cope with the measurement challenge of men in polygamous societies who may have multiple partners within marriage, it is necessary to disaggregate this indicator by marital status including polygamy. Furthermore, given that the likelihood of HIV transmission during recent (acute) infection may be an order of magnitude greater than during chronic infection, it may be desirable to conduct analyses to assess the percentage of sexually active individuals who had two or more partners during the previous two months. Quantifying the prevalence of overlapping or concurrent partnerships may provide a useful proxy for quantifying possible exposures to HIV during the period of acute infection.

**Platform:** Population based surveys such as UNAIDS general population survey, DHS/AIS, BSS (youth), RHS

**Frequency:** Baseline, then every 2-3 years

#### REFERENCES

- WHO-UNAIDS (2004) *Guide to Monitoring and Evaluating National HIV/AIDS Prevention Programs for Young People*. Geneva. [www.who.int/hiv/pub/epidemiology/me\\_prev\\_yp/en](http://www.who.int/hiv/pub/epidemiology/me_prev_yp/en)

## HIV OUTCOME INDICATOR (HIV-OI 2):

### ABSTINENCE Primary abstinence

Percentage of young women and men aged 15-19 who never had sex.

#### RATIONALE

This indicator provides information on important aspects of sexual behavior. It describes the proportion of young people surveyed who never had sex, thus the prevalence of virginity among young people. Looking at this prevalence within narrow age ranges (15-16, 17-19, for example, or ideally, by single ages) across time allows program managers to see if the age at first sex is changing.

#### DEFINITION OF INDICATOR

**Numerator:** Number of young women and men aged 15-19 who never had sex

**Denominator:** Number of young women and men aged 15-19 surveyed

#### MEASUREMENT

Respondents (15-19 year olds) are asked if they have ever had sex.

The indicator should be reported separately for men and women.

If the indicator is calculated for groups of ages larger than the period of change in abstinence, the indicator will not reflect changes e.g. change in abstinence among 15-19 year old, will not reflect change over a 2-3 year period. It is therefore recommended that this indicator be reported by single age.

**Platform:** Population based surveys such as DHS/AIS, RHS

**Frequency:** Baseline, then every 2-3 years

#### REFERENCES

- *Adapted from UNAIDS (2004)*

## HIV OUTCOME INDICATOR (HIV-OI 3):

### ABSTINENCE Secondary abstinence

Percentage of young women and men aged 15-24 who never had sex in the last year of those who ever had sex.

#### RATIONALE

This indicator is a measure of sex among young people. A high score on this indicator reflects a failure of prevention messages stressing abstinence. Given that young people should be the focus of education and prevention programs, deciding to abstain from sex after having precocious sexual activity would be a desired program outcome. This indicator measures changes in what may be culturally and socially ascribed norms for early sexual activity. Where programs are advocating a delay of first sex or abstinence, the indicator should show a decrease.

#### DEFINITION OF INDICATOR

**Numerator:** Number of women and men aged 15-24 who never had sex in the last 12 months

**Denominator:** Number of women and men aged 15-24 who ever had sex

#### MEASUREMENT

In a survey among people aged 15-24, respondents are asked about their sexual partnerships in the last twelve months and before.

The indicator should be reported separately for men and women.

**Platform:** Population based surveys such as UNAIDS general population survey, DHS/AIS, BSS (youth), RHS

**Frequency:** Baseline, then every 2-3 years

#### REFERENCES

- *Adapted from UNAIDS (2000)*

## HIV OUTCOME INDICATOR (HIV-OI 4):

### CONSISTENT CONDOM USE

#### Young people's condom use with non-regular partners

Percentage of young people aged 15-24 reporting the consistent use of a condom with non-regular sexual partners in the last year.

#### RATIONALE

This indicator shows the extent to which condoms are used by young people who engage in sexual relationships with non-regular partners.

When interpreting trends in this indicator, it should be noted that changes might reflect variations in the numbers of persons having sex with non-regular partners and not necessarily variation in condom use. Thus, this indicator should be analyzed carefully considering the changes in proportion of young people having sex with a non-regular partner to understand the programmatic implications.

#### DEFINITION OF INDICATOR

**Numerator:** The number of young men and young women aged 15-24 years who had sex with non-regular partners in the last 12 months and consistently used a condom

**Denominator:** Young men and young women aged 15-24 years who had sex with non-regular partners in the last 12 months

**Note:** The target population for this indicator is 15- to 24-year-olds. Data should always be reported separately for males and females. When sample sizes permit, it is also useful to report for age groups 15-19 and 20-24.

#### MEASUREMENT

Respondents are first asked if they have ever had sex. Among those who have, questions are asked about the consistent use of condom with all the partners in the last year and information on the type of partner (such as spouse, live-in partner, boyfriend/girlfriend, acquaintance, commercial sex worker).

This indicator should be presented as a percentage, separately for males and females, in three age groups: 15-19, 20-24 and 15-24.

**Platform:** Nationally representative general population survey

**Frequency:** Preferably biennial; at a minimum every 4-5 years

#### REFERENCES

- *Adapted from UNAIDS (2000)*

## PREVENTION INDICATOR (HIV-OI 5):

### BEHAVIOR CHANGE COMMUNICATION Intravenous drug users: safe injecting and sexual practices

Percentage of IDUs who have adopted behaviors that reduce transmission of HIV, i.e. who both avoid sharing non-sterile injecting equipment and use condoms.

#### RATIONALE

Safe injecting and sexual practices among injecting drug users (IDUs) are essential, even in countries where other modes of HIV transmission predominate, because: (1) the risk of HIV transmission among IDUs using contaminated injecting equipment is extremely high; and (2) IDUs can provide a reservoir of infection from which HIV spreads (e.g., through sexual transmission) to the wider population.

#### DEFINITION OF INDICATOR

**Numerator:** Number of respondents who report having never shared injecting equipment during the last month and who also reported that a condom was used the last time they had sex

**Denominator:** Number of respondents who report injecting drugs in the last month and having had sexual intercourse in the last month

**Note:** Analysis and reporting disaggregated by age (those less than 25 and those over 25) is recommended.

#### MEASUREMENT

Survey respondents are asked the following sequence of questions:

1. Have you injected drugs at any time in the last month?
2. If the answer to question 1 is "yes": Have you shared injecting equipment at any time in the last month?
3. Have you had sexual intercourse in the last month?
4. If the answers to questions 1 and 3 are both "yes": Did you (or your partner) use a condom when you last had sex?

**Platform:** Time-location cluster sample survey or targeted snowball sample survey (see behavioral surveillance survey (BSS) manual)

**Frequency:** Biennial

#### REFERENCES

- *FHI (2000) Behavioral Surveillance Surveys (BSS): guidelines for the repeated behavioral surveys in Populations at risk of HIV*
- *UNAIDS (2005) Monitoring the Declaration of Commitment on HIV/AIDS: Guidelines on construction of core indicators-2006 reporting, UNGASS, Geneva*

## CARE AND SUPPORT (HIV-OI 6):

### SUPPORT FOR ORPHANS Orphans' school attendance

Ratio of orphaned children compared to non-orphaned children aged 10-14 who are currently attending school.

#### RATIONALE

HIV/AIDS is claiming lives of ever-growing numbers of adults just as they are forming families and bringing up children. As a result, orphan prevalence is rising steadily in many countries. Fewer relatives within the prime adult ages means that orphaned children face an increasingly uncertain future. Orphanhood is frequently accompanied by prejudice and increased poverty – factors that can further jeopardize children's chances of completing school education, which may lead to the adoption of survival strategies that increase vulnerability to HIV. It is important, therefore, to monitor the extent to which AIDS-support programs succeed in securing the educational opportunities of orphaned children.

#### DEFINITION OF INDICATOR

*Orphans' school attendance (1):*

**Numerator:** Number of children (10-14 years old) who have lost both parents and are still in school

**Denominator:** Number of children (10-14 years old) who have lost both parents

*Non-orphans' school attendance (2):*

**Numerator:** Number of children (10-14 years old) both of whose parents are still alive, who live with at least one parent and who are still in school

**Denominator:** Number of children (10-14 years old) whose parents are both still alive and who live with at least one parent

*Calculate the ratio of (1) to (2)*

**Note:** Indicator scores are required for all children aged 10-14 years and for boys and girls separately. Where possible, the indicator should also be calculated by single year of age. The minimum number of orphaned 10-14 year old children needed to calculate this indicator is 50.

#### MEASUREMENT

In a population-based survey respondents are asked whether they are currently attending school. The indicator is the ratio of the current school attendance rate of children aged 10–14 both of whose biological parents have died to the current school attendance rate of children aged 10–14 whose parents are both still alive and who currently live with at least one biological parent.

Countries are also strongly encouraged to report the ratio of OVC attending school versus non-OVC attending school. In countries where the number of children who are orphans is relatively low (less than 5–8 percent of the population under age 18), this indicator will overcome the problem of low numbers of double orphans.

**Platform:** Population-based surveys such as DHS, UNICEF MICS, or other representative survey

**Frequency:** Every 2-4 years

#### REFERENCES

- UNAIDS/UNICEF (2005). *Guide to monitoring and evaluation of the national response for children orphaned and made vulnerable by HIV/AIDS*. New York: UNICEF. [www.unaids.org/EN/in+focus/monitoringevaluation/m\\_e+library.asp](http://www.unaids.org/EN/in+focus/monitoringevaluation/m_e+library.asp)
- UNAIDS (2005) *Monitoring the Declaration of Commitment on HIV/AIDS: Guidelines on construction of core indicators-2006 reporting*, UNGASS, Geneva