Investing in our future
The Global Fund
To Fight AIDS, Tuberculosis and Malaria

MONITORING
AND
EVALUATION
TOOLKIT

HIV/AIDS,
TUBERCULOSIS
AND
MALARIA

Second Edition
January 2006

ADDENDUM March 2008

About the revision of the M&E Toolkit, second edition (January 2006)

During the last four years, the Global Fund, in collaboration with key partners and donors, has developed two editions of the 'Monitoring and Evaluation Toolkit' (i.e., the 2004 and 2006 version). Both versions have served as a reference document to Performance-based Funding in which standards in Monitoring and Evaluation (M&E) and their relation to partner agreed and Global Fund M&E principles and requirements are described. By providing a core set of internationally agreed upon indicators, for inclusion in Global Fund grant agreements, the Global Fund contributes to a more harmonized approach to setting M&E frameworks. In addition, the 2006 edition of the M&E Toolkit has introduced the "Global Fund Top Ten Indicators" to encourage further streamlining of data collection for a minimal set of quality indicators.

Strategies in fighting the three diseases have been revised over recent years to better achieve the Millennium Development Goals (MDGs). This includes, but is not limited to, the revised Stop TB Strategy (2006), new trends in fighting malaria (such as the call for Universal Access and Elimination of Malaria and the revised strategy from the Global Malaria Program) and, for HIV, the Framework for Universal Access to HIV/AIDS treatment, prevention, care and support (2007-2010). In addition, efforts have been made by technical agencies to revise existing programmatic indicators according to these enhanced strategies. For HIV/AIDS, a partner-agreed core set of indicators has recently been approved. Countries will need updated "tools", enabling them to build M&E systems that reflect these new developments. The Global Fund has therefore embarked on the development of the *third edition of the 'Monitoring and Evaluation Toolkit'*, to be published in August 2008. As with the two previous editions, the Global Fund has engaged international technical agencies and M&E experts in this endeavour in a participative process. The Third Edition M&E Toolkit will be a revision and updating of the 2006 Toolkit, rather than a substantially new version.

Objective of the Monitoring and Evaluation Toolkit revision:

1. **Adapt and harmonize content to new partner programmatic strategies and revised recommendations for monitoring of program implementation in the three diseases;**
2. **Reinforce the measurement framework for some already existing strategies (e.g., Health Systems Strengthening, including capacity building/training; service delivery at community level); show measurement from capacity building, people reached by services, to the MDGs;**
3. **Establish improved measurement methods and give guidance in cross-cutting areas that require strengthening in the current Toolkit (e.g., target setting, quality of services, age and gender);**
4. **Provide clearer links between indicators and the data collection and analysis systems which require strengthening and investment (e.g., using five to ten percent of grant funds to invest in relevant surveys, surveillance and mortality systems).**

This March 2008 Addendum

The present Addendum introduces the most tangible updates in measurement frameworks and related indicators for each of the three diseases and Health Systems Strengthening. It is a recommended tool for use by countries preparing Global Fund Round 8 proposals *for example indicators*. Performance based funding principles remain unchanged and can be found in the second edition (January 2006) of the M&E Toolkit.

The recommended indicators in this Addendum have been, as much as possible during the short period of time, selected in a participatory process with key partners. For some areas, however, gaps remain and considerably more time has been allocated for consultation for the full publication in August 2008. Detailed descriptions of indicators will be provided in the Annex of the August Toolkit version.

I. HIV/AIDS

This section of the March 2008 Addendum to the M&E Toolkit (2006) provides an overview of revised indicators at the output, outcome and impact levels for HIV/AIDS. Most indicators are extracted from the set of 40 *Core National Indicators*[1] which has been developed by UNAIDS in collaboration with 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.

The indicators provide guidance, and countries should choose indicators for inclusion in the Global Fund Performance Frameworks from their own reporting, with special reference to the 40 UNAIDS core indicators. Some of the indicators in this Addendum are currently under development and a comprehensive, fully revised set will be presented in the Third Edition of the M&E Toolkit, to be published in August 2008.

As in the 2006 Second Edition of the M&E toolkit, 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.

Details of the 40 core national indicators and the other indicators contributed by key partners will be included in the Annex to the Third Edition of the M&E Toolkit. The former, i.e., the detailed description of the indicators in the UNAIDS core set, can also be found upon its publication on the UNAIDS website.

[1] The set of Core National Indicators is foreseen for publication in early 2008. It provides *minimum* necessary information for national-level monitoring of the AIDS epidemic and response (i.e., 25 UNGASS indicators, which are required for monitoring the Declaration of Commitment on HIV/AIDS, and 15 additional recommended indicators). The set of core indicators helps to focus attention in the country on key prevention, treatment and care components of the AIDS response and the resulting impacts.

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

Some of these indicators can be collected through monthly health statistics and the annual program review. However, others may be best collected through 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
Prevention	Behavioral Change Communication - Mass media	HIV/AIDS information, education, communication (IEC) material broadcasted or distributed (radio & television programs / newspapers) (report numbers) *(Area under development for the August 2008 Toolkit version)*
	Behavioral Change communication – community outreach and schools	Schools that provided life skills-based HIV education in the last academic year (**UNGASS #11**) (number and percentage) Young women and men aged 15-24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject the major misconceptions about HIV transmission (**UNGASS #13**) (number and percentage) Most-at-risk populations who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission (**UNGASS #14**) (percentage) Most-at-risk populations reached with HIV-prevention programs (**UNGASS #9**) (number and percentage) • Data should be reported separately for each most-at-risk population (injecting drug users, men who have sex with men, sex workers) Young people reached by life-based HIV/AIDS education in schools (number and percentage) *(Area under development for the August 2008 Toolkit version)*Young people out of school reached by HIV/AIDS prevention programs (number and percentage) *(Area under development for the August 2008 Toolkit version)*
	Condoms	Total number of male and female condoms available for distribution nation-wide during the last 12 months per person aged 15-49 (**Additional Recommended Indicator #11**) Disaggregation: • Total number of male and female condoms available for sale through the private sector • Total number of male and female condoms available for distribution free of charge Young women and men aged 15-24 who report they could get condoms on their own (**Additional Recommended Indicator #12**) (number and percentage) Condoms sold through the private sector (report numbers) Condoms distributed for free (report numbers)

	Service Delivery Area	Output Indicators
	Testing and Counselling	Women and men aged 15-49 who received an HIV test in the last 12 months and who know their results (**UNGASS #7**) (number and percentage) • Data can also be collected on a more frequent basis from program records Most-at-risk populations who received an HIV test in the last 12 months and who know their results (**UNGASS #8**) (number and percentage) Sexually active young women and men aged 15-24 who received an HIV test in the last 12 months and know their results (**Additional Recommended Indicator #5**) (number and percentage) People who tested HIV positive and have received counselling for positive prevention (essential prevention and care for people living with HIV) (number and percentage) *(Area under development for the August 2008 Toolkit version)*
	PMTCT	Pregnant women who were tested for HIV and know their result (**Additional Recommended Indicator #7**) (number and percentage) HIV-infected pregnant women who received antiretrovirals to reduce the risk of mother-to-child transmission (**UNGASS #5**) (number and percentage) Infants born to HIV-infected women who received an HIV test within 12 months (**Additional Recommended Indicator #8**) (number and percentage) Infants born to HIV-infected women started on cotrimoxazole prophylaxis within two months of birth (**Additional Recommended Indicator #9**) (number and percentage)
	Post-exposure prophylaxis (PEP)	Health facilities with post-exposure prophylaxis (PEP) available (**Additional Recommended Indicator #1**) (number and percentage)
	Sexually transmitted infections (STI) diagnosis and treatment	Health facilities that offer STI diagnosis, treatment and counseling in line with national guidelines (number and percentage) *(Area under development for the August 2008 Toolkit version)*
	Blood safety and universal precaution	Donated blood units screened for HIV in a quality-assured manner (**UNGASS #3**) (number and percentage)

	Service Delivery Area	Output Indicators
Treatment	Antiretroviral treatment and monitoring	Adults and children with advanced HIV infection receiving antiretroviral therapy (**UNGASS #4**) (number and percentage) Health facilities that offer ART (i.e., prescribe and/or provide clinical follow-up) (**Additional Recommended Indicator #2**) (number and percentage) Health facilities dispensing ARV that experienced stock-outs of ARV in the last 12 months (**Additional Recommended Indicator #3**) (number and percentage) Facilities providing ART using CD4 monitoring in line with national guidelines / policies, on site or through referral (**Additional Recommended Indicator #4**) (number and percentage) Facilities offering ART that meet national targets for ART patient on-time drug pick-ups (number and percentage)
	Prophylaxis and treatment for opportunistic infections	People living with HIV receiving diagnosis and treatment for opportunistic infections (number and percentage) *(Area under development for the August 2008 Toolkit version)*
Care and Support	Care and support for the chronically ill	Community organizations that received support to assist people living with HIV (number) People living with HIV receiving care at community level (number) *(Area under development for the August 2008 Toolkit version)*
	Support for orphans and vulnerable children	Orphaned and vulnerable children aged 0-17 whose households received free basic external support in caring for the child (**UNGASS #10**) (number and percentage)
Collaborative activities	TB/HIV	People with HIV receiving HIV testing and counseling or HIV treatment and care services who were screened for TB symptoms (number and percentage) *(Indicator under revision for the August 2008 Toolkit version)* Newly diagnosed HIV positive clients given treatment for latent TB infection (number and percentage) *(Indicator under revision for the August 2008 Toolkit version)* TB patients who had an HIV test result recorded in the TB register (**Additional Recommended Indicator #6**) (number and percentage) HIV positive TB patients who receive co-trimoxazole preventive therapy (number and percentage) HIV-positive TB patients referred to HIV care and support services during TB treatment (number and percentage) Estimated HIV positive incident TB cases that received treatment for TB and HIV (**UNGASS #6**) (number and percentage)
Supportive	Policy development including workplace policy	National Composite Policy Index (**UNGASS #2**)

	Service Delivery Area	Output Indicators
	Strengthening of civil society and institutional capacity building	NGOs providing HIV/AIDS prevention, treatment, care and support services according to national guidelines (number) *(Area under development for the August 2008 Toolkit version)* NGOs actively involved in planning, budgeting, monitoring and evaluation of HIV and HIV/TB activities (number) *(Area under development for the August 2008 Toolkit version)* National Composite Policy Index (**UNGASS #2**)
	Stigma reduction in all settings	Policy makers attending sensitization workshops on HIV/AIDS and HIV/TB (number) *(Area under development for the August 2008 Toolkit version)* National Composite Policy Index (**UNGASS #2**)

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

	Impact Indicators	Reporting Schedule	Measurement	Reference
Impact Indicators	Percentage of young women and men aged 15-24 who are HIV infected (**HIV prevalence**) (**UNGASS #22**)	Annual	HIV sentinel surveillance and population-based survey	*UNGASS*
	Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy (**Reduced mortality**) (**UNGASS #24**)	Every 2 years	Program monitoring	*UNGASS*
	Percentage of infants born to HIV infected mothers who are infected (**Reduced mother to child HIV transmission**) (**UNGASS #25**)	Annual	Estimate based on program coverage	*UNGASS*
	Percentage of most-at-risk populations who are HIV-infected (**HIV prevalence**) (**UNGASS #23**)	(Modelled at UNAIDS headquarters, based on program coverage)	Treatment protocols and efficacy studies	*UNGASS*
	Percentage of children under age 18 who are orphans (**Additional Recommended Indicator #10**)	Every 2 years	Population based survey	*UNAIDS, UNICEF*
	HIV seroprevalence among all newly registered TB patients (percentage)	Annual	Routine HIV testing, sentinel surveillance, periodic special survey	WHO HIV/TB

	Outcome Indicators	Reporting schedule	Measurement	Reference
Outcome Indicators*	**Multiple partners**: Women and men aged 15-49 who have had sexual intercourse with more than one partner in the last 12 months (**UNGASS #16**)	Every 2-5 years	Population-based survey	UNGASS
	Primary abstinence: Percentage of never married young men and women aged 15-24 who have never had sex (**Additional Recommended Indicator #13**)	Every 2-5 years	Population-based survey	WHO/UNAIDS
	Percentage of young women and men aged 15-24 who have had sexual intercourse before the age of 15 (**UNGASS #15**)	Every 2-5 years	Population-based survey	UNGASS

	Outcome Indicators	Reporting schedule	Measurement	Reference
	Percentage of injecting drug users reporting the use of a condom the last time they had sexual intercourse (**UNGASS #20**) Percentage of injecting drug users reporting the use of sterile injecting equipment the last time they injected (**UNGASS #21**)	Every 2 years	Behavioral survey	UNGASS
	Current school attendance among orphans and non-orphans (**UNGASS #12**)	Every 2-5 years	Population-based survey	UNGASS
	Percentage of women and men aged 15-49 who have had more than one sexual partner in the past 12 months reporting the use of a condom during their last sexual intercourse (**UNGASS #17**)	Every 2-5 years	Population-based survey	UNGASS
	Percentage of women and men aged 15-49 expressing accepting attitudes towards people with HIV (**Additional Recommended Indicator #15**)	Every 2-5 years	Population-based survey	WHO/UNAIDS
	Percentage of female and male sex workers reporting the use of a condom with their most recent client (**UNGASS #18**)	Every 2 years	Behavioral survey	UNGASS
	Percentage of men aged 15-49 reporting sex with a sex worker in the last 12 months who used a condom during last paid intercourse (**Additional Recommended Indicator # 14**)	Every 2-5 years	Population-based survey	UNAIDS
	Percentage of men reporting the use of condom the last time they had anal sex with a male partner (**UNGASS #19**)	Every 2 years	Behavioral survey	UNGASS

**Note: HIV sexual behavior indicators should be analyzed together to assess behavior change (as important interactions can occur). Outcomes can be collected every 2-5 years; with a population-based survey (e.g., DHS or MICS) every five years and an AIDS indicator survey (behavioral surveillance) in between.*

II. Tuberculosis (TB)

One of the critical steps in designing and carrying out monitoring and evaluation of a TB program is the selection of appropriate indicators. In addition to the well articulated objectives that define quantity, quality and time, the choice of indicators for monitoring and evaluation requires careful thought and consideration of conceptual and pragmatic matters. A balance of input, process, output and outcome indicators is necessary to explain success and gaps in program implementation.

This section includes partner-recommended indicators for inclusion in Global Fund Performance Frameworks for TB grants. The revised Table 11 shows the main impact and outcome indicators for TB control in general. The indicators noted here are general in nature and appropriate for monitoring TB control, particularly through national TB control programs. Examples of indicators to monitor and evaluate more specific TB control interventions (such as public private mix, community TB care, laboratory strengthening or DOTS Plus for multidrug-resistant tuberculosis [MDR-TB] in appropriate settings) are included in the revised Table 10. Please note that this is not an exhaustive list and readers are encouraged to consult the references below (such as the *Compendium of Indicators for Monitoring and Evaluating National Tuberculosis Programs and Planning Frameworks*) and relevant literature for further information.

Revised Table 10: Selected Programmatic Indicators for Tuberculosis

	Service Delivery Area	Output Indicators	Examples of Outcome indicators
Objective 1: High Quality DOTS	SDA 1.0 **High Quality DOTS**	New smear-positive TB cases that successfully complete their treatment among the new smear-positive TB cases registered during a specified time period (number and percentage*	**Case detection rate:** New smear positive TB cases detected (diagnosed and reported to the national health authority), among the new smear positive TB cases estimated to occur countrywide each year (number and percentage) **Treatment success rate**: New smear-positive TB cases that successfully complete their treatment among the new smear-positive TB cases registered during a specified time period (number and percentage)
	SDA 1.2 **Improving diagnosis**	New smear positive TB cases detected (diagnosed and reported to the national health authority during each quarter/year), among the new smear-positive TB cases estimated to occur countrywide each quarter/year (number and percentage)* Laboratories performing regular EQA for smear microscopy (number and percentage) Laboratories performing regular EQA for culture and DST (number and percentage)	
	SDA 1.3 **Patient support**	Patients receiving incentives or enablers (number and percentage)	
	SDA 1.4 **Procurement and supply management (First-line anti-TB drugs)**	TB basic management units (BMU/district) that reported a stock out in first line drugs that resulted in interruption of treatment during the reporting period out of all BMUs (number and percentage)	
	SDA 1.5.1 **M&E**	Health facilities submitting timely reports according to national guidelines (number and percentage)	
Objective 2: Address TB/HIV, MDR-TB and Other Challenges	SDA 2.1 **TB/HIV****	Registered TB patients who are tested for HIV (during and before TB treatment) expressed as a proportion of the total number of all registered TB cases(number and percentage) HIV positive TB patients who receive at least one dose of co-trimoxazole preventive therapy (CPT) during their TB treatment, expressed as a proportion of the total number of HIV positive TB patients (number and percentage)	
	SDA 2.2 **MDR-TB**	Bacteriologically confirmed MDR TB cases notified (number and percentage) Treatment success rate of MDR cases-Bacteriologically confirmed MDR-TB cases that successfully complete treatment according to programme protocol among all the MDR-TB cases registered on treatment during a specified time period.	

	Service Delivery Area	Output Indicators	Examples of Outcome indicators
	SDA 2.3.1 **High risk groups**	Smear-positive TB cases identified in prisons (number and percentage) TB cases identified among TB contact (number) TB contacts screened for TB among high risk groups (number) Treatment success rate of smear-positive TB cases identified in prison (or other groups)- New smear-positive TB cases that successfully complete their treatment among the new smear-positive TB cases registered during a specified time period in prison (or other groups) (number and percentage)	
Objective 3: Contribute to HSS	SDA 3.2 **Practical Approach to Lung Health (PAL)**	Health facilities implementing PAL (number and percentage) Respiratory cases among outpatients in health facilities (in NHIS) (number and percentage) TB suspects identified in the health facilities (number)	
Objective 4: Engage All Care Providers	SDA 4.1/4.2 **All care providers** (PPM/ISTC)	Private/ Public non-NTP facilities participating in DOTS activities following the ISTC among all planned (number and percentage) TB patients registered for treatment in private/public non NTP facilities among all TB patients registered for treatment ((number and percentage)	
Objective 5: Empower People With TB and communities	SDA 5.1 **ACSM**	Individuals with correct knowledge about TB (such as mode of transmission, curability, duration of treatment, etc.) - this can be measured at the beginning and end of the activity through a KAP survey (percentage)	
	SDA 5.2 **Community TB care**	Patients managed by the community throughout treatment (number and percentage) New smear positive patients referred by the community to diagnostic services (number and percentage)	

	Service Delivery Area	Output Indicators	Examples of Outcome indicators
Objective 6 Enable and Promote Research	SDA 6.1 **Operational research**	Operational research studies completed and results disseminated through global TB M&E system (number)	

**Treatment success rate and case detection rate are outcome indicators to be reported annually as well as quarterly. Although these indicators are supported by several Service Delivery Areas, for routine reporting purposes these are included under one specific Service Delivery Area.*

***See HIV/TB indicators in the HIV section for comprehensive HIV/TB core set of indicators*

Source of information for the indicators selected:

- Guide to monitoring and evaluation for collaborative TB/HIV activities Compendium of indicators, Guidelines on implementing Public private mix for DOTS (see full description in the Annex).
- Revised TB recording and reporting forms and registers – *version 2006,* WHO/HTM/TB/2006.373 (http://www.who.int/tb/dots/r_and_r_forms/en/index.html)

Revised Table 11: Selected Tuberculosis Impact and Outcome Indicators

	Indicator	Target	Measurement	Reference
Impact indicators	**TB prevalence rate.** Estimated number of all active TB cases per 100,000 population at a given point in time	Halving of prevalence by 2015, relative to 1990	Measured by special surveys	JAMA article, WHO Global TB Control (especially page 54)
	TB incidence rate. Estimated number of TB cases occurring per year, per 100,000 population (can be used for specific population sub-groups, e.g. annual incidence of TB in the prison system).		Measured by special surveys	JAMA article, WHO Global TB Control (especially page 54)
	TB mortality rate. Estimated number of deaths due to TB (all cases) per year, per 100,000 population	Halving of mortality by 2015, relative to 1990	Measured by special surveys	JAMA article, WHO Global TB Control (especially page 54)
Outcome indicators	**Case detection rate.** New smear-positive TB cases detected (diagnosed and reported to the national health authority), among the new smear-positive TB cases estimated to occur countrywide each year (number and percentage)	70% under DOTS, nationally by 2005	Quarterly/ Annually and nationally via routine health information system PLUS estimates produced by WHO	WHO Global TB Control and Compendium of Indicators
	Treatment success rate. New smear-positive TB cases that successfully complete their treatment among the new smear-positive TB cases registered during a specified time period. Successful completion entails clinical success with or without bacteriological evidence of cure (number and percentage)	85% under DOTS nationally for the cohort of new smear-positive patients by 2005	Quarterly, routine health information system. Evaluated by cohort, ideally for all types of new and re-treatment cases.	WHO Global TB Control Compendium of Indicators

General resources

- Tuberculosis Monitoring and Evaluation team of Stop TB Department of WHO: building capacity at country level for monitoring, evaluation and evidence-based planning, conducting global surveillance of epidemiological and financial trends in TB control.
- Stop TB Partnership Working Groups: The following implementation working groups provide a focus for coordinated action and support monitoring and evaluation of country-level activities related to:
    - DOTS expansion, including sub-groups on laboratories, public-private mix and childhood TB
    - TB/HIV
    - DOTS Plus for MDR-TB
    - Advocacy, communication and social mobilization
    - Global Working Group on Indicators – a partnership between the World Health Organization, World Bank, U.S. Centers for Disease Control and Prevention, International Union Against Tuberculosis and Lung Disease (the Union), KNCV Tuberculosis Foundation, U.S. Agency for International Development (USAID) and Measure. Contact: cvincent@usaid.gov

Technical assistance

TBTEAM: Linking countries with technical assistance

With increased financial resources in countries and efforts to implement all components of the Stop TB Strategy, there is an increased demand for technical assistance. More Stop TB partners are available to provide support in countries requiring and improvement in coordination. TBTEAM, the Technical Assistance Mechanism of the Stop TB Partnership, provides the platform to link countries with technical assistance in a coordinated way.

TBTEAM objectives are:

- To facilitate planning of technical assistance according to needs;
- To promote available TB expertise;
- To provide a platform for coordination of technical assistance and avoid duplication of efforts;
- To encourage collaboration of partners at every level.

To achieve these objectives, TBTEAM promotes the use of the following web-based tools:

- Stop TB missions and events (including open requests for assistance)
- Stop TB experts
- Stop TB partner mapping

These tools can be viewed at http://extranet.who.int/tbteam.

For technical assistance, countries may apply through the standard WHO channels by submitting requests to country offices or other TBTEAM focal points at country, regional and global levels.

The TBTEAM focal points will use TBTEAM tools to accommodate requests. For help in identifying the relevant TBTEAM focal point or other information, the global TBTEAM secretariat can be contacted as follows: tbteam@who.int

Software products

Various software applications are available to assist TB control programs in managing and analyzing routinely collected TB data.
Systems for managing routinely collected electronic patient-based records are available from WHO EMR (baghdadis@emro.who.int), US CDC (ccw2@cdc.gov), and WHO Geneva (bleedd@who.int).
Systems for managing routinely collected aggregated data (e.g. quarterly reports on cases registered, treatment outcomes, etc) are available from WHO SEAR (choudhurah@searo.who.int) and WHO Geneva (hosseinism@who.int).
WHO 'HealthMapper' can be used to map data imported from the systems noted above. (http://www.who.int/health_mapping/tools/healthmapper/en/
csr/mapping/tools/healthmapper/healthmapper/en/).
In addition, EpiData is software that may be useful in rapidly designing a questionnaire and data entry tool for non-routine data collection http://www.epidata.dk.

Guidelines and essential references

Global Tuberculosis Control: Surveillance, Planning, Financing. WHO Report 2005, Geneva, World Health Organization (WHO/HTM/TB/2005.349).
http://www.who.int/gtb/publications/globrep/index.html
Compendium of Indicators for Monitoring and Evaluating National Tuberculosis Programmes, World Health Organization, Geneva. (WHO/HTM/TB/2004.344).

World Health Organization (2002). An expanded DOTS framework for effective tuberculosis control.
http://www.who.int/gtb/publications/dots/pdf/TB.2002.297.pdftb/dots/framework/en/index.html

World Health Organization (2003), Management of Tuberculosis Training for health facility staff.
http://www.who.int/tb/publications/who_cds_tb_2003_314/en/index.html

World Health Organization (1998). Laboratory services in tuberculosis control.
http://whqlibdocs.who.int/hq/1998/WHO_TB_98.258_(part1).pdf

Guidelines on implementing Public-Private Mix for DOTS: engaging all health care providers to improve access, equity and quality of care in TB control.
http://www.who.int/gtb/publications/whodoctb/dots/ppm/en/index.html

World Health Organization (2001). The Use of Indicators for communicable disease control at district level.http://whqlibdoc.who.int/hq/2001/WHO_CDS_TB_2001.289.pdf

World Health Organization (2001). Good practice in legislation and regulations for TB control: An indicator of political will. http://whqlibdoc.who.int/hq/2001/WHO_CDS_TB2001.290.pdf

Christopher Dye, DPhil; Catherine J. Watt, DPhil; Daniel M. Bleed, MD; S.Mehran Hosseini, MD; Mario C. Raviglione, MD. 'Evolution of Tuberculosis Control and Prospects for Reducing Tuberculosis Incidence, Prevalence, and Deaths Globally'. JAMA 2005; 293: 2767-2775.

Implementing the Stop TB Strategy A handbook for national tuberculosis control programmes- due to published in February 2008

Guidelines for the programmatic management of drug-resistant tuberculosis, WHO/HTM/TB/2006.361

Planning Frameworks
http://www.who.int/tb/dots/planningframeworks/r8preparation/en/index.html

III. Malaria

The malaria epidemic has rapidly changed over the last few years. In order to reflect the new context the key partners involved in fighting the disease adjusted the selection of core indicators in the malaria M&E framework. Most adaptations are made to advance M&E, especially in circumstances where improved malaria prevention and control interventions may reduce true malaria cases. Adaptations also allow capturing coverage with combined malaria prevention interventions, such as ITN and IRS, to give the full and accurate picture of prevention coverage. A few changes are made to the Services Delivery Areas and the recommended methods of data collection.

This section provides the revised M&E framework for malaria prevention and control. The revised Table 12 below shows a list of partner-agreed selected programmatic indicators and the revised Table 13 lists the most relevant outcome and impact indicators. Detailed descriptions of all indicators will be provided in the Third Edition of the M&E Toolkit in August 2008. The revision of the "Guidelines for Core Population Coverage indicators for Roll Back Malaria" is currently underway and will be referred to in the Third Edition also.

Revised Table 12: Selected Programmatic Indicators for Malaria

	Service Delivery Area	Output Indicators	Examples of Outcome/Impact Indicators
Prevention	Insecticide-treated nets (ITNs)	ITN (including retreatment kits) distributed to people (number)	Households owning at least one ITN (percentage) Children under 5 years of age who slept under an ITN the previous night (percentage)
	Malaria prevention during pregnancy	ITNs (including retreatment kits) distributed to pregnant women (number) Pregnant women receiving IPT (number)	Pregnant women who slept under an ITN the previous night (percentage) Pregnant women in stable endemic areas receiving intermittent preventive treatment (IPT) (percentage)
	Indoor Residual Spraying	Volumes of insecticide used for indoor residual spraying	Households in areas at risk of malaria transmission that were sprayed with insecticide in the past 12 months as proportion of houses targeted (percentage) Households in areas at risk of malaria transmission owning at least one ITN or were sprayed with insecticide in the past 12 months as proportion of houses targeted (percentage).
	BCC Community outreach	People reached by BCC community outreach activities (can be for specific groups) (number and percentage)	People (can be specific groups) who know the cause, symptoms, preventive measures and treatment of malaria (number and percentage)
Treatment	Prompt and effective treatment	People receiving anti malaria treatment according to national policy (number) Health facilities with no reported stock outs of nationally recommended anti malaria drugs lasting more than one week at any time during the last 3 months (percentage) (MALARIA-TI 3)	Children under 5 years of age (or other target groups) with fever receiving anti malaria treatment according to national policy within 24 hours of onset of fever (percentage) Proportion of children under 5 years of age (or other target groups) with confirmed malaria receiving anti malaria treatment according to national policy within 24 hours of onset of symptoms. (percentage) Patients admitted with severe malaria receiving correct treatment at health facilities (percentage)
	Home Management of Malaria (HMM)	People reached through home-based management of malaria (can be for specific groups) (number)	Children under 5 years of age (or other target groups) with fever receiving anti malaria treatment through home-based management within 24 hours of onset of fever (percentage)
	Diagnosis	Malaria microscopy slides taken (number) Rapid Diagnosis Tests (RDT) taken (number)	Proportion of children under 5 years of age with fever (or other target groups) with fever who are tested for malaria (with microscopy or an RDT) Health facilities with malaria diagnostic equipment (percentage)

	Service Delivery Area	Output Indicators	Examples of Outcome/Impact Indicators
Supportive Environment	Monitoring drug resistance	Functional sentinel sites for monitoring anti malaria drug resistance (number) Studies of drug efficacy completed according to WHO protocol (number)	
	Monitoring insecticide resistance	Functional sentinel sites for monitoring insecticide resistance (number)	
	Coordination and partnership development (national, community, private)	Community groups (NGOs, CBO) taking action against malaria (number)	

IV. Health System Strengthening

Programs to address HIV, tuberculosis, and malaria (HTM) require support from public and private organizations. These organizations rely on effective, efficient, sustainable and transparent systems to: provide pharmaceuticals and other health products; finance health services; assure the quality and efficiency of care; manage the health workforce; and generate information needed for effective policy, operations and programming decisions. Where system weaknesses are important obstacles to responding to the three diseases, the Global Fund will consider providing resources for health systems strengthening (HSS).

Global Fund support for HSS is available where the funding requested:

1. Is essential to achieve planned outputs and outcomes for the three diseases;
2. Addresses general health systems weaknesses which are beyond a specific programme's mandate but will contribute to improved HTM outcomes;
3. Consistent with (where they exist) national policy directions, for example, a health sector development plan, a national financing strategy or a health workforce plan.

HSS proposed for funding will depend on the country-specific context but may generally belong to some or all of the following broad areas (HSS SDAs) (which are the same as the six building blocks in the WHO Framework for HSS Action[2]):

- Service delivery organization and management
- Health Workforce / Human resources
- Information
- Medical products, vaccines, technology (*procurement, supply management, etc*)
- Financing
- Leadership and governance

Global Fund support for interventions within the HSS SDAs, like disease program interventions, is tied to output and outcome indicators to objectively measure performance.

Table 15 provides a number of illustrative *examples* of possible HSS output and outcome indicators by HSS SDA that applicants may wish to use to formulate their own indicators. The list is not exhaustive and additional indicators can be used.. In many cases, it is important to disaggregate relevant indicators to enable monitoring of progress in achieving equity of access and coverage of essential services for underserved communities, regions or other prioritized or vulnerable population groups (gender, rural/urban, income based). Reviewing data collected from selected indicators at both national and sub-national levels helps to highlight internal disparities and assists to establish appropriate country-specific baselines and targets.

As far as possible, the Global Fund encourages the use of existing in-country indicators used to monitor health systems performance. For example, those specific indicators that are part of a program-based approach (including SWAp) performance matrix or other national strategic frameworks.

WHO is in the process of developing a "HSS Toolkit" which is anticipated to be available by mid-2008. It is expected include other examples of indicators, their definitions and measurement methods as well as explanations of the various HSS blocks.

[2] Refer to WHO guidance at: http://www.who.int/healthsystems/strategy/en/

Selected references/resources:

- Health Metrics Network, *Strengthening Country Health Information Systems: Assessment and Monitoring Tool (version 2.00)*, Geneva, 2007 [available on URL: http://www.who.int/healthmetrics/support/tools .

- Bossert, T. et al, *Assessing financing, education, management and policy context for strategic planning of human resources for health*, World Health Organization, Geneva, 2007.

- Management Sciences for Health and World Health Organization, *Tools for planning and developing human resources for HIV/AIDS and other health services*, Geneva, 2006, available at: http://www.who.int/hrh/tools/planning].

- WHO, 2007 Everybody's Business, Strengthening Health Systems to Improve Health Outcomes", available at: http://www.who.int/healthsystems/strategy/en/

- WHO, 2007, World Health Statistics available at: http://www.who.int/healthinfo/statistics/en/

- A Global Fund guide to procurement plans, with relevant indicators is available at: http://www.theglobalfund.org/en/about/procurement/guides/#psm

- WHO information on indicators to monitor in-country pharmaceutical situations is available at: http://www.who.int/medicinedocs/collect/medicinedocs/index/assoc/s14101e/s14101e.pdf

New: Table 15A: HSS SDAs and illustrative examples of interventions

HSS Service Delivery Areas	Illustrative examples HSS Interventions
Service Delivery	Actions may be needed to improve how HIV/AIDS, tuberculosis and malaria prevention, treatment, and care and support services are organized and delivered, and to expand access to all services. Possible activities include actions to strengthen public demand for services; improving supervision and the management of resources and facilities; involving civil society and the private sector in public health service delivery; and strengthening laboratories and other diagnostic services including renovating or upgrading health facilities. Activities and targets must relate to the equity and access needs of vulnerable and deprived populations. *(Note that the Global Fund will not fund large infrastructure projects, such as the construction of hospitals).*
Health Workforce	Actions may be needed to strengthen the production of health workers as well as their recruitment, distribution, retention, training and productivity. Actions may include, strengthening workforce management; improving incentives to address distribution or retention; or task shifting to less specialized health workers. The focus should not only be on clinical service providers but also management and support staff essential to keep a system running.
Information Systems	Actions may be needed to strengthen the generation and use of information/data needed to manage services and to account for results. This includes monitoring of health system inputs and service delivery coverage (health systems performance) with special reference to the three diseases, and cross-cutting priority areas. It may include strengthening the collection and quality of mortality statistics; and investing in the systematic use of evidence to guide decisions at the facility and district levels. Activities include improving data collection and analysis using multiple data sources such as surveys and building district and national data management capacity for M&E, operational research and surveys. It may also mean formulating and implementing clear national information policy and standards and expanding reporting by private-for-profit health service providers.
Medical Products, Vaccines, Technology *	To achieve more equitable access to essential medicines[3] and technologies, actions may be needed to: strengthen policies, standards, and guidelines; and/or build capacity to set and negotiate prices; quality assessment of priority products; strengthen procurement systems, improve supply and distribution systems; and strengthen mechanisms to enforce rational use of medicines, commodities and equipment. (*Note that the Global Fund will not fund basis science research and clinical research aimed at demonstrating the safety and efficacy of new pharmaceuticals and vaccines).*
Financing	Actions may be needed to improve financial risk protection and coverage for vulnerable groups in order to reduce the burden of out-of-pocket payments. Actions may also be needed to ensure the transparent and effective use of resources, including: strengthening financial resource tracking systems, (including HIV/AIDS, tuberculosis and malaria accountability and reporting through the institution of national sub-accounts); and improving financial access to essential services through development of sustainable financing plans as part of national financing strategies. Also, efforts to improve financial management at operational levels and by NGOs/civil society groups may be required to strengthen service delivery and increase coverage of prevention, treatment, and care and support services[4]. Other activities might involve developing ways of reducing household out of pocket payments; such as exemption mechanisms, vouchers and other demand side incentives, or to strengthen health insurance schemes for the benefit of key affected populations in respect of the three diseases.
Leadership and Governance	This involves improved governance of health systems with special reference to positive impact on of HIV/AIDS, tuberculosis and malaria service delivery and utilisation. Actions that may be needed include: strengthening advocacy capacity; building coalitions with other sectors and civil society; improving oversight and regulation of services provided by government and non-government providers; instituting regular performance reviews, and supporting policy and systems research.

[3] An Essential Medicines List is a government-approved selective list of medicines or national reimbursement list.
[4] With indicators for effective financial management.

Revised Table 15: Examples of Health Systems Strengthening Indicators

HSS Service Delivery Areas	HSS Output indicators	HSS Outcome indicators	Disease Specific Output / Outcome/ Impact
Service Delivery[5]	Number (%) facilities and/or laboratories / renovated / upgraded to a specified standard and delivering a specific service package — by type, geographical area, and public/private Number (%) of facilities and/or laboratories (a) receiving supervisory visit in past 12 months, and (b) fulfilling basic quality assurance criteria — by type, geographical area, and public/private Number of Civil Society Organisations receiving support for organisational and system development providing public health services at community level including to vulnerable populations — by type of service, geographical area and group (e.g. vulnerable populations; Sexual Minorities, Internally displaced persons, Intravenous Drug users, commercial sex workers, indigenous groups, migrants/ refugees etc)	Number (%) of all facilities offering basic package of services (public/private) Proportion of population with access to basic services[6] — by geographical area and other socio-demographic characteristics[7] (e.g. vulnerable groups: Proportion of population with access to care and support services — by geographical area and other socio-demographic characteristics[8] (e.g. vulnerable groups).	Disease specific output / outcomes / impact indicators should be included (e.g. see specific disease section)
Health Workforce	Number of health workers recruited at primary health care facilities in past 12 months by cadre; e.g. as % of planned recruitment target Number of graduates of health training programmes in past 12 months, by cadre, urban/rural, gender, etc Number (%) of facility-based and/or community based health workers who reported receiving personal supervision in last six months Number (%) of senior staff at primary health care facilities who received in-service management training in past 12 months National strategy in place for training Civil Society Organisations for service provision	Health worker density per 1,000 population, (by cadre, urban/rural or other geographic delimitation) % of PHC facilities meeting national approved staffing norms.	

[5] For a detailed example for service delivery - see annex 2 at end of this document.
[6] Access as defined by the country itself.
[7] Based on countries' own definitions of basic package, access and service availability etc.
[8] Based on countries' own definitions of basic package, access and service availability etc.

HSS Service Delivery Areas	HSS Output indicators	HSS Outcome indicators	Disease Specific Output / Outcome/ Impact
Information Systems[9]	Number of staff trained on monitoring and evaluation, surveillance, and operational research (per level including civil society) % of registered private-for-profit facilities/civil society organisations reporting routine data according to national guidelines in past 12 months A nationally coordinated multi-year plan with a schedule for survey implementation and data analysis prepared Percent of deaths covered by mortality civil registration system	% Districts submitting timely and complete reports on all public health and management indicators as per national guidelines % of deaths classified under ill-defined categories % of districts with updated and objective information obtained through facility census or surveys on service delivery (drugs, commodities, human resources, skills	Disease specific output / outcomes / impact indicators should be included (e.g. see specific disease section)
Medical Products, Vaccines and Technology	Number (%) of staff (by region) trained/recruited for procurement and supply management & quality assurance in past 12 months (as % of planned target) No. and % of facilities with staff trained for Procurement Supply Management and fully applying national regulations	Average stockout duration for a basket of medicines in the central and/or regional stores in the last year, out of average stockout duration for the same basket in the past three years. Average stockout duration for a basket of medicines in a sample of remote facilities in the last year, out of average stockout duration for the same basket in the past three years. Average time between order and delivery from central store to remote facilities in the last year out of average time between order and delivery in the past three years	
Financing	Patient / household out of pocket expenditures of accessing or obtaining services Number and % of facilities meeting established national financial management criteria Number of Civil Society organisations with budget and accounting system in place	Out of pocket expenditure by households as % of Total Health Expenditure (or prepaid expenditure as % of Total Health Expenditure - where prepaid = tax plus insurance)	
Leadership and Governance	Health sector development strategic plan developed, agreed, implemented and reviewed annually Number of staff receiving training in past 12 months on strategic planning and policy development per level Private health sector policy developed and implemented, including existence of an up-		

[9] All the health system building blocks require information as part of their interventions, as well as for verification purposes and proposals should ideally have information requirements needed to support indicator measurements for other health system strengthening blocks.

HSS Service Delivery Areas	HSS Output indicators	HSS Outcome indicators	Disease Specific Output / Outcome/ Impact
	to-date and accurate private provider registration system Number & % of Civil Society Organisations that work in partnership with a public/private provider in delivering services Frequency of other governance/ stewardship mechanisms - e.g. audits, reviews of performance against targets		