

MONITORING AND EVALUATION TOOLKIT

HIV, Tuberculosis, Malaria
and Health and Community
Systems Strengthening

**PART 5: HEALTH AND
COMMUNITY SYSTEMS
STRENGTHENING**

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The Global Fund
To Fight AIDS, Tuberculosis and Malaria

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Contents

| | |
|---|------------|
| Part 1: The Global Fund M&E requirements | 5 |
| Part 2: HIV | 40 |
| Part 3: Tuberculosis | 160 |
| Part 4: Malaria | 218 |
| Part 5: Health and Community Systems Strengthening | |
| Acknowledgements | 256 |
| Acronyms | 256 |
| 1. Introduction to monitoring and evaluation of health and community systems strengthening | 257 |
| 2. M&E of health systems strengthening | 258 |
| 2.1 Linking to the national health strategy M&E plan | 258 |
| 2.2 Key health systems strengthening actions | 259 |
| 2.3 Strengthening M&E systems through health systems strengthening grants | 260 |
| 2.4 Key issues and considerations for M&E of HSS in Global Fund grants | 261 |
| 2.5 Evaluation of HSS efforts | 267 |
| 3. M&E of community systems strengthening | 268 |
| 3.1 Key community systems strengthening actions | 268 |
| 3.2 Key issues and considerations for M&E of CSS in Global Fund grants | 277 |
| 3.3 Data sources for CSS indicators | 285 |
| 3.4 Evaluation of CSS Efforts | 285 |
| Annex 1: HSS Resources | 285 |
| Annex 2: CSS Resources | 286 |
| Annex 3: Description of Health and Community Systems Strengthening indicators | 289 |

Acronyms

| | |
|---------------|---|
| ANC | antenatal care |
| ART | antiretroviral therapy |
| CBO | community-based organization |
| CSS | community systems strengthening |
| DOTS | the basic package that underpins the Stop TB strategy |
| GAVI | GAVI Alliance, formerly the Global Alliance for Vaccines and Immunisation |
| HCSS | health and community systems strengthening |
| HIS | health information systems |
| HMIS | health management information system |
| HSS | health systems strengthening |
| IHP+ | International Health Partnership and related initiatives |
| IPT | intermittent preventive treatment (for malaria) |
| LLIN | long-lasting insecticidal net |
| MNCH | maternal, neonatal and child health |
| NGO | nongovernmental organization |
| PMTCT | prevention of mother-to-child transmission (of HIV) |
| RDT | rapid diagnostic test |
| UNGASS | United Nations General Assembly Special Session |

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Our sincere appreciation goes out to all those who contributed to this truly collaborative effort.

Health and Community Systems Strengthening

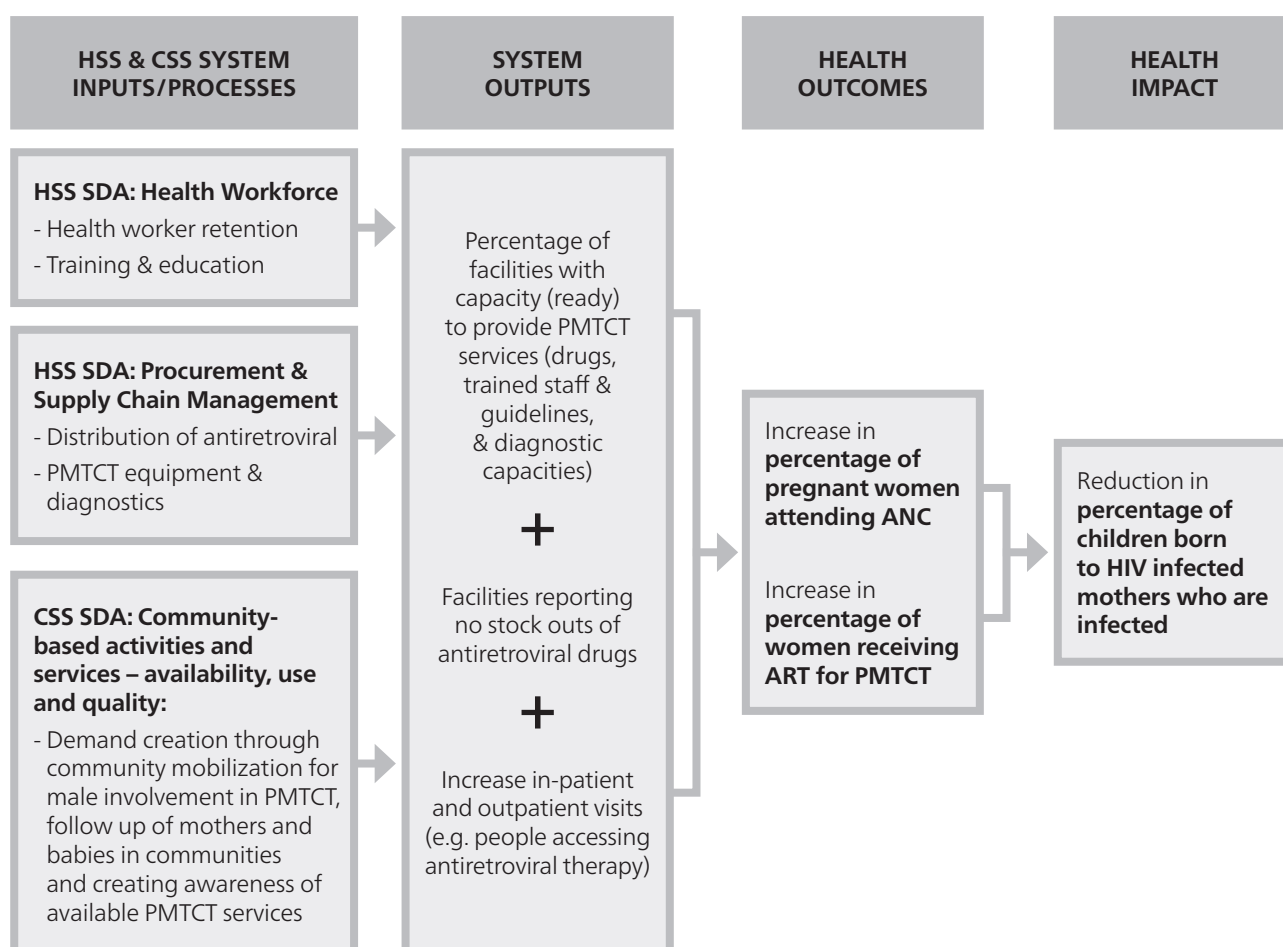
1. Introduction to monitoring and evaluation of health and community systems strengthening

Strong health and community systems are required for improving overall health outcomes, including those related to HIV, tuberculosis (TB) and malaria. This portion of the Monitoring and Evaluation Toolkit is divided into three parts: Section 1 is an introduction to HSS and CSS, including their interactions; Section 2 focuses on the monitoring and evaluation (M&E) of health systems strengthening) and Section 3 describes the M&E of community systems strengthening.

Health outcomes are not only the result of interventions in the health facilities, they are also linked to community-level activities. Figure 1 presents a graphic representation of this relationship using the

example of preventing mother-to-child transmission (PMTCT) of HIV. Three service delivery areas (SDAs),¹ or key categories of interventions (see Section 3), are presented. The first is a health systems strengthening (HSS) SDA focusing on health workforce development. The second is also an HSS SDA, but on procurement and supply chain management; the specific activities include the procurement and distribution of condoms, medicines, commodities, equipment and diagnostics for PMTCT. The third is a community systems strengthening (CSS) SDA: Community-based activities and services – availability, use and quality. In this illustration, this CSS activity involves follow-up of mothers and pregnant women by community groups to increase adherence to the prophylaxis regimen; to encourage pregnant women to deliver at health facilities; and to follow up on infants at six weeks. These actions should result in an increased demand for PMTCT services at health facilities.

FIGURE 1.
Complementarity between HSS and CSS efforts to improve health outcomes



¹ To achieve each objective, the key activities to be delivered are defined under a thematic grouping of similar activities termed service delivery area (SDA). An SDA therefore represents a thematic compilation of activities. For HSS the eight thematic groupings under which activities are organized are: facility management and organization; procurement and supply chain management; health workforce; routine data collection, analysis and use; surveys, evaluation and research; health financing; stewardship and governance; and infrastructure.

In this example, the demand being created is for utilization of PMTCT services by HIV-positive pregnant women. The joint actions across HSS and CSS are therefore expected to improve service availability, readiness and utilization at the output level. Three indicators are presented to illustrate this: percentage of facilities with capacity to provide PMTCT services; facilities reporting no stock-outs of antiretroviral for PMTCT; and — for demand creation and increase in service utilization — inpatient and outpatient attendance at health facilities. Improvements in these output level indicators should then contribute to the increase in antenatal care (ANC) visits by HIV-positive mothers and pregnant women, who are then likely to increase their intake of antiretroviral therapy (ART) for PMTCT, measured by the indicator: percentage of women receiving ART for PMTCT. The increase in ANC attendance and PMTCT uptake should then be reflected in impact indicators, such as the reduction in percentage of infants born to HIV-positive mothers who are infected.

This example reflects how community-level efforts create demand, which can lead to improvements in health service delivery (e.g. availability, readiness and use), ultimately resulting in improved health outcomes and impact.

2. M&E of health systems strengthening

The following section presents an approach for M&E of health systems strengthening activities. Section 2.1 describes essential information on linkages to the M&E plan of the national health strategy. Section 2.2 includes an overview on what activities are considered health systems strengthening, including particular funding categories by the Global Fund. Section 2.3 describes how Global Fund grants can be used to strengthen M&E systems, while Section 2.4 presents a sample of indicators that can be used for reporting on health systems strengthening activities. In selecting indicators countries and partners have to ensure a link with the appropriate activities in section 2.3, for which they are requesting funding. Information on how to evaluate health systems strengthening is described in Section 2.5. Additional resources on health systems strengthening can be found in Annex 1.

2.1 Linking to the national health strategy M&E plan

Health systems strengthening actions can include a range of interventions, many of which are outlined in Section 2: *Key Health Systems Strengthening Actions*. Most often, these activities are part of a broader national health strategy, the implementation of which is measured using a comprehensive national health sector monitoring and evaluation plan. The core guidance on M&E of national health strategies, of which health and community systems strengthening (HCSS) M&E activities are a part, is the

“Monitoring, Evaluation and Review of National Health Strategies”² document developed by the World Health Organization (WHO) as part of a collaborative effort (involving the Global Fund, the GAVI Alliance, the World Bank, and other country and global partners) within the context of the International Health Partnership (IHP+) and related activities. The guidance builds on a common M&E framework for health progress, performance reviews and health systems strengthening that has been developed by the IHP+, in line with the principles derived from the Paris Declaration on Aid Effectiveness.

Countries submitting a health systems strengthening proposal to the Global Fund are strongly encouraged to refer to this guidance, particularly because a national M&E plan for the health sector is required for grant signing. For countries that do not have an M&E plan, this guidance is useful for developing the plan. Technical assistance to develop a national health strategy M&E plan can also be included as part of a health systems strengthening proposal to the Global Fund. More information on M&E support as part of a health or community systems strengthening proposal is provided in Section 2.3.

As outlined in the guidance, a sound M&E plan for the national health strategy addresses the key attributes listed in Box 1.

BOX 1. Key attributes and characteristics of a sound health sector M&E plan²

- The national health strategy specifies a sound monitoring, evaluation and review component.
- Roles, responsibilities and coordination mechanisms for monitoring, evaluation and review are clearly defined.
- Capacity-strengthening in monitoring, evaluation and review is addressed,
- There is a comprehensive framework that guides the monitoring, evaluation and review work, including core indicators and targets.
- The monitoring, evaluation and review component specifies data sources, identifies and addresses data gaps, and defines responsibilities for data collection and information flow.
- Data analysis and synthesis work is specified, and data quality issues are anticipated and addressed.
- Data dissemination and communication are effective and regular.
- Prospective evaluation is planned and implemented.
- There is a system of joint periodic progress and performance reviews.
- There are processes by which related corrective measures can be taken and translated into action.

² Monitoring, evaluation and review of national health strategies. Geneva: WHO. Available from: http://www.who.int/classifications/ME_component_nationalhealthplans_prepub_july2011.pdf

A subset of the indicators drawn from the national health sector M&E plan are useful for performance-based funding in the context of the Global Fund. The criteria for selecting these indicators for monitoring grant performance and evaluation of HSS efforts financed by the Global Fund are discussed in Section 2.4, with linkages to areas for which countries would seek funding.

2.2 Key health systems strengthening actions

The Global Fund's approach to health systems strengthening consists of investing in activities to help health systems overcome constraints to the achievement of improved outcomes for HIV, TB and malaria. Many of the interventions within this scope will also strengthen maternal, neonatal, and child health (MNCH) outcomes.

While the purpose of this toolkit is to provide information on M&E of HSS, this section provides a brief summary of key HSS actions, categorized as service delivery areas that can be funded by the Global Fund. These areas fall within six broad system components: service delivery; health workforce; information, monitoring and evaluation; financing; stewardship and governance; and infrastructure. The system components and corresponding service delivery areas are listed below. For more guidance on activities that the Global Fund will support related to HSS, please refer to the HSS Information Note.³

- **SERVICE DELIVERY (access and availability):** This system component relates to improving or strengthening delivery of services. A well-functioning health service system delivers effective, safe, high-quality health interventions to those who need them, when and where needed, with minimum waste of resources. There are two HSS SDAs under this component: facility management and organization, and procurement and supply chain management. The key actions to strengthen each of these two SDAs are detailed below:

SDA 1.1: Facility management and organization: The following activities are illustrations of what could be done to improve or strengthen organizational and facility management for the effective execution of policies, norms and regulations at the institutional level: ensuring the appropriate skill-mix of health workers at the facility level; ensuring the availability of facility-level systems for essential pharmaceuticals; ensuring that guidelines for the delivery of health services are available and complied; improving hospital waste management systems; recruiting and retaining facility managers and other nonclinical support staff; training and education for nonclinical staff; setting up hospital accounting systems; and revising clinical protocols of care.

SDA 1.2: Procurement and supply chain management:

A well-functioning health system ensures equitable access to essential medical products, vaccines and technologies of assured quality, safety, efficacy and cost-effectiveness as well as to their scientifically sound and cost-effective use. Achieving more equitable access to essential medicines and technologies may require creating or strengthening procurement, supply, and storage and distribution systems to minimize leakage and other waste, as well as improving rationale use. Some illustrative activities to strengthen and or improve the procurement and supply chain management may therefore include: enhancing staff capacity; recruiting and retaining procurement and supply chain management staff; supporting storage and distribution systems; and enhancing safety and safety practices for pharmaceuticals.

- **HEALTH WORKFORCE:** For countries to meet their respective health goals, they need people with knowledge, appropriate skills and the motivation to organize and deliver health services. Many countries lack these human resources for varied reasons, including: inadequate capacity of training institutions, internal and international migration, poor mix of required skills, and an unequal geographic distribution of health workers. The key actions to improve and/or strengthening the health workforce SDA could therefore include the following:

SDA 2.1: Health Workforce: Strengthen the capacity of health worker training institutions to increase the numbers of graduates. Improve the quality of graduates, for example by increasing trainers/tutors, training tutors, providing incentives for learners; strengthening or improving retention initiatives, both in-kind and financial; improving workplace health and safety; providing supportive supervision; and providing in-service training, including on the job training, study tours and supportive supervision for staff.

IMPORTANT NOTE: *Enhancing skills through training should be based on a national standard training curriculum and, wherever possible, trained staff should be accredited.*

- **INFORMATION/MONITORING AND EVALUATION:** The WHO advises that reliable information is essential to facilitate: health system policy development and implementation; governance and regulation of health services; health research; human resources development; health education and training; service delivery; and financing of health services. A well-functioning health information system therefore ensures the production, analysis, dissemination and use of reliable and timely information on the determinants of health, health system performance and health status. Relevant M&E strengthening

³ The Global Fund's approach to health systems strengthening (HSS). Geneva: The Global Fund; 2011. Available from: <http://theglobalfund.org/WorkArea/DownloadAsset.aspx?id=13240>

activities should be clearly articulated and budgeted in the proposal application. There are two SDAs under this component aimed at improving information, monitoring and evaluation processes and systems:

SDA 3.1: Routine data collection, analysis and use: Developing or strengthening routine health information system (to routinely capture health information from both the public and nonpublic sector); strengthening data quality procedures for routine information systems; strengthening vital registration systems; developing or strengthening disease surveillance systems; recruiting and training staff for routine information systems; enhancing staff skills in data analysis, synthesis and use; and publication and dissemination of monitoring and evaluation reports.

SDA 3.2: Surveys, evaluation and research: Implementation of population- and facility-based surveys and censuses; undertaking implementation research, program evaluation and sector reviews; conducting health systems research and epidemiological studies; recruiting and training staff for episodic data collection systems (such as surveys/censuses, research and evaluations); strengthening data quality procedures for episodic data collection systems; and conducting policy analysis.

More detailed information about Global Fund support for national M&E systems strengthening can be found in Section 2.3. Countries are also encouraged to refer to the guidance on M&E of national health strategies, which may provide additional insight on measures for strengthening the health sector M&E system.

- **FINANCING:** Good health financing mobilizes, accumulates and allocates funds to cover the health needs of people, individually and collectively. Therefore people are able to use needed services and are protected from financial catastrophe or impoverishment associated with having to pay for them. There is one HSS SDA under this component, as detailed below:

SDA 4.1: Health financing: Improving financial risk protection and coverage for vulnerable groups through provision of cash support to scale up health insurance enrollment; mobilizing sufficient resources for health; enhancing efficient use of these resources; enhancing financial transparency and management at the operational level; developing revolving funds; and providing financial and nonfinancial incentives to increase utilization of health service by the population in need of the services.

- **STEWARDSHIP AND GOVERNANCE:** This component focuses on high-level structural activities, such as coalition-building, the existence of appropriate regulations and incentives, the existence and effective oversight of strategic policy frameworks, processes for accountability, and the overall design of the health

system. It involves improving the governance of health systems with special reference to the positive impact of the delivery and utilization of services for maternal, newborn and child health, HIV/AIDS, tuberculosis, and malaria. The specific actions may include the following:

SDA 5.1 Stewardship and governance: Development of national health strategies and policies that reflect national needs and priorities; national malaria policy that defines a framework of setting up and monitoring medium- and long-term objectives in the public and private sectors; developing or strengthening procedures that ensure that good practices for procurement of pharmaceuticals and medical products; development of disease strategies that meet global agreements commitments (for example, the Stop TB Strategy); strengthening advocacy capacity; building coalitions with other sectors and civil society; improving the oversight and regulation of services provided by government and nongovernmental providers; instituting regular performance reviews; supporting policy and research on health systems; developing social health insurance regulations; revising providers reimbursement systems and benefits packages; supporting intersectoral coordination and undertaking policy supervision visits.

In terms of stewardship and governance related to M&E, the activities could be related to M&E coordination and management, development of M&E plans, development of general M&E training materials and guidelines, facilitating implementation of M&E self-assessment and establishing functional M&E technical working groups or forums.

• INFRASTRUCTURE

SDA 6.1 Infrastructure: To improve infrastructure for service delivery at all levels, actions may include: small/medium-scale rehabilitation and maintenance of clinical and nonclinical government, non-governmental organization, faith-based organization or privately owned facilities (e.g. tertiary and secondary level hospitals, primary care clinics, and health posts); and provision of equipment, furniture, hardware, software, vehicles and other assets that contribute to health systems strengthening.

2.3 Strengthening M&E systems through health systems strengthening grants

Health systems strengthening proposals can include the strengthening efforts for countries' health sector M&E systems, as illustrated in Section 2.2. This section provides additional information on the types of M&E systems strengthening activities that can be used to improve the overall health system. Part 1 of this toolkit includes additional detailed information on recommendations related to M&E systems strengthening.

2.3.1 Improving data sources

In terms of assessing progress and performance of health systems strengthening efforts, multiple data sources are required. For each indicator, the preferred data source should be identified along with the best alternatives. It is therefore essential that these data sources are included and sufficiently budgeted for in a country's health sector M&E plan. Identifying data-critical gaps or data weaknesses is critical. More details on strengths and weaknesses of these different data sources can be found in the WHO handbook for *"Monitoring the Building Blocks of Health Systems: A Handbook of Indicators and their Measurement Strategies"*.⁴

When submitting proposals to the Global Fund for health and community system strengthening, countries are encouraged to specify the data sources that generate the selected core indicators. Where there are gaps or weaknesses in the specified data sources, countries are encouraged to provide a costed plan to address identified gaps and weakness. Activities incorporated may include costs relating to strengthening or improving specific data sources required for generating the relevant indicators identified in the proposal. These could include:

- **Administrative records, such as human resource databases and financing:** In many countries, the computerization of administrative records — including public expenditure, staffing and payroll, work permits, health insurance and social security records — greatly facilitates the possibilities for analysis. The administrative records of health training institutions and professional licensing bodies are potentially valuable sources for tracking the health workforce as many skilled health-care providers require formal training, registration and licensure to practice their professions. These sources offer the advantage of producing continuously updated statistics.
- **Implementing systematic facility assessments of service readiness and record reviews:** Selected indicators fill critical data gaps relating to service delivery and serve to verify the quality of routinely reported data from both public and private service providers.
- **Developing / strengthening routine facility reporting system:** A health information system (HIS) or health management information system (HMIS) generally collects data to facilitate monitoring of service delivery. The data are generated at the facility level and include key information on the services and care offered as well as treatment administered. Reporting may also include: data on supervision or clinic-reported data on medicine stock-outs; functionality of outreach or community services; and availability and functioning of health workers. Additionally, the HMIS

also collects data on hospital records, which are the basis for statistics related to inpatient and outpatient activities and may include statistics on: number of beds; admissions, discharges and deaths; outpatient visits or general utilization of services. It is important to note the problems associated with routine facility reporting, such as late and incomplete reporting, which should be addressed to facilitate production of good reliable data. Despite the data quality challenges, the fact that routine data is collected continuously (often monthly or quarterly) facilitates time and seasonal trend analyses, which are useful for day-to-day program management and decision-making for better and improved service delivery.

- **Strengthening civil registration and vital statistics:** Improve the availability and quality of data on births, deaths and cause of deaths.
- **Supporting population-based surveys:** All countries collect some data on their population, mainly through periodic demographic censuses and household sample surveys that produce statistical information about the people, their homes, their socioeconomic conditions and other characteristics. Most censuses and labor force surveys ask for the occupation and place of work of the respondent (and other adult household members) along with other demographic characteristics, including age, sex and education levels.

2.3.2 Improving data quality, analysis, dissemination and use

Data quality and use for decision-making is critical to the overall purpose of the M&E system. Through the use of enhanced supervision, training, standardization and harmonization, countries can improve the quality of data at all levels of the system. Training, mentoring, and partnerships can improve the analysis and use of data. Efforts to improve data quality, analysis, dissemination and use should be clearly described and budgeted in the national health sector M&E plan.

2.4 Key issues and considerations for M&E of HSS in Global Fund grants

This section provides guidance on the selection of indicators when developing proposals to Global Fund for health systems strengthening. The detailed definitions of the indicators can be found in the WHO guidance for *"Monitoring the Building Blocks of Health Systems: A Handbook of Indicators and their Measurement Strategies"*.⁵ The section also includes some information on the evaluation of HSS, however further guidance on evaluation is still being developed and will be made available as an addendum to this toolkit.

4 WHO. Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies. Geneva: WHO; 2010. Available from: http://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf

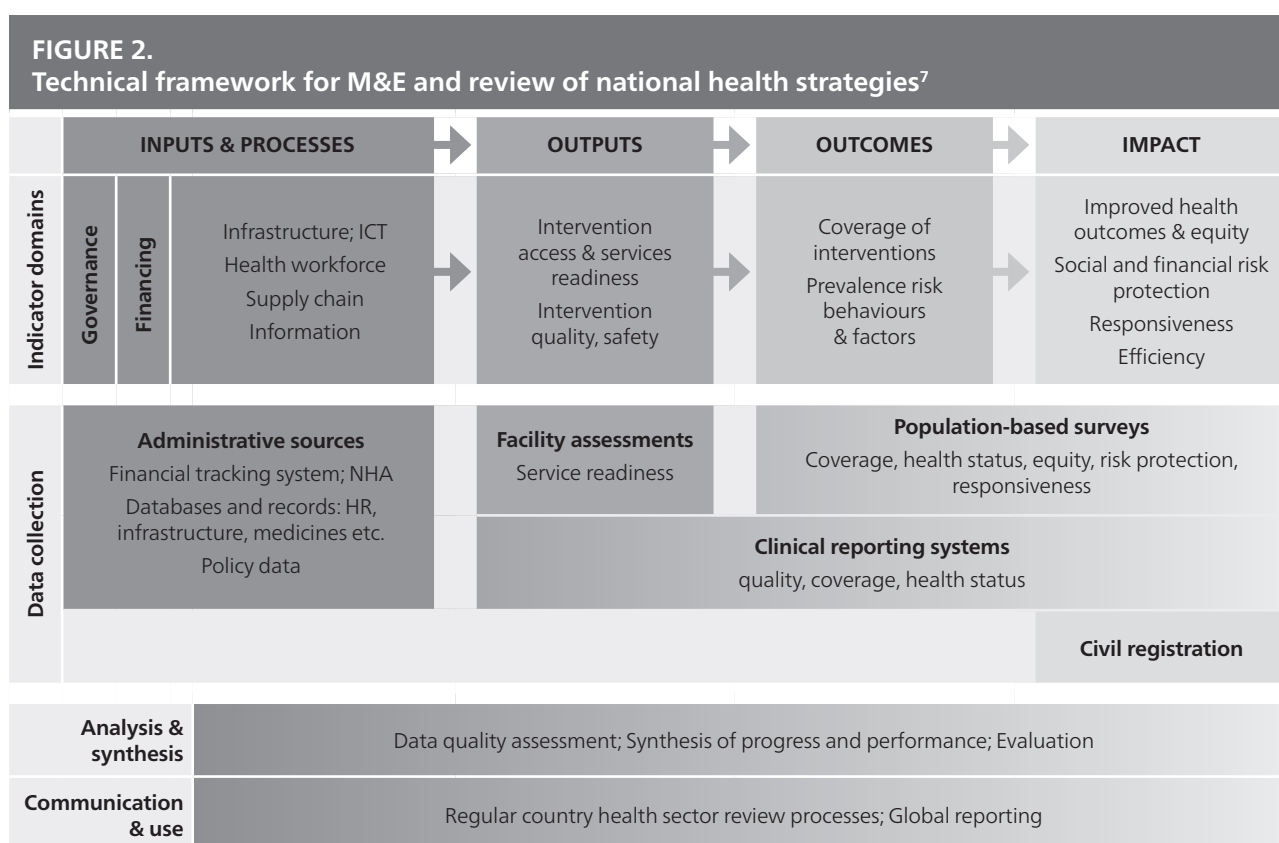
5 The document can be accessed at: http://www.who.int/classifications/ME_component_nationalhealthplans_prepub_july2011.pdf

2.4.1 Selection of indicators

To monitor HSS grants, countries are encouraged to use a subset of indicators from their national health sector M&E plan that are directly related to the areas being funded by the Global Fund. The national M&E plan should be developed using the common M&E framework to guide the selection of indicators and corresponding data sources for HSS (Figure 2).⁶ The indicators included in the national health sector M&E plan should be informed by scientific soundness, relevance, and data availability. Reference sets of indicators for health systems strengthening can be found in the *WHO handbook of indicators and their measurement strategies for HSS*.⁷ Several selected indicators are defined in Annex 3 of this section. The framework also highlights the need for the M&E plan to address existing data gaps, the plans and needs for data analysis, data quality assessment, communication and use and how those data and results are fed into country review and planning processes.

The Global Fund also classifies several core programmatic indicators as “top ten indicators”, and indicators for periodic reviews of grants. More information on the top ten and periodic review indicators is provided in Box 2.

In selecting indicators, countries and partners need to recognize the importance of ensuring a good balance of indicators across the entire results chain and also be cognizant of the importance of pre-identifying and ensuring functionality of corresponding data sources that would ensure availability of data for the selected indicators. A selection of a balanced set of indicators across the results chain for HSS is provided in Table 1 on page 276. This table is for illustrative purposes only, and countries are advised to base the selection of indicators based on the priorities and objectives of their national health plan and the activities being funded by the grant. The table shows how inputs and processes into the health system (e.g. resources, supply chain, infrastructure) are reflected in outputs (such as availability of services and



⁶ International Health Partnership and related initiatives (IHP+). Available at: <http://www.internationalhealthpartnership.net/en/home>

⁷ WHO. Monitoring the building blocks of health systems: A handbook of indicators and their measurement strategies. Geneva: WHO; 2010. Available at: http://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf

interventions quality) and eventual outcomes (such as coverage) and impact, including use of services and better health status (Table 1 on page 276).

Input/process and output indicators are described in Table 2 on page 277. Outcome-level indicators monitor the effects of the functionality of the health system on population risk behaviors and increased program coverage in the context of HIV/AIDS, malaria, tuberculosis and MNCH (Table 3 on page 278). At the

impact level, the effects should be monitored through improvements in health status (reduction in morbidity and mortality) and increased financial risk protection (Table 4 on page 279). In selecting health system input/process and output indicators, countries should identify corresponding disease outcome and impact indicators that best demonstrate the desired health outcomes resulting from increased investments.

BOX 2. Top 10 and periodic review indicators

The Concept of Top 10 Indicators: Within the context of Global Fund architecture of performance based funding, core sets of indicators called “Top 10” are identified within the disease programs. The indicators are predominantly “people reached with services” type of indicators and they are weighted more within the grant rating system. The five indicators below for HSS have therefore been identified to serve as part of the “Top 10” list and they are based on the WHO recommended HSS indicators. The identification of a core set of HSS indicators that will have greater weight within the grant rating system ensures that rating for HSS grants is consistent with the disease grants:

Output

- *Number of graduates from health training institutions*
- *Annual rate of retention of health service providers*
- *Percentage of districts submitting timely, complete and accurate reports*
- *Number and percentage of health facilities offering specific services*
- *Average availability of HIV/AIDS, TB and malaria drugs*

Periodic Review HSS Outcome/Impact Indicators: Under the new grant architecture, the Global Fund analyses outcome and impact level trends linked to intervention investments for disease. Similarly, for HSS, health outcomes to which HSS investments are supposed to contribute are analyzed during periodic reviews. To ensure some systematic and consistency application of this review, a list of outcome and impact

indicators are listed below, however, the selection of the indicators to use for each HSS grant will be determined by the focus of the health outcome that the HSS proposal intends to effect, therefore this is a more comprehensive list a subset of which would have to be selected as appropriate for each grant:

Outcome

- *Suspected malaria cases that have laboratory diagnosis*
- *TB case notification rate*
- *Percentage of adults/children with advanced HIV infection receiving ART*
- *Percentage of HIV-positive pregnant women who receive ART for PMTCT*
- *Percentage of women attending antenatal care*
- *Percentage of institutional deliveries*

Impact

- *Child mortality rate*
- *TB case notification rate*
- *Percentage of adults/children alive and on treatment 12 months after initiation of treatment*
- *Percentage of infants born to HIV positive mothers who are infected rate*
- *Confirmed malaria cases*
- *The ratio of household out-of-pocket as payments for health to total expenditure on health*

TABLE 1.
Global Fund-recommended indicators for monitoring & evaluating health systems strengthening

| Health system inputs & processes | Health system outputs | Health outcomes (coverage & risk factors) | Health impact |
|---|--|---|---|
| <ul style="list-style-type: none"> • Total health expenditure per capita • Percentage of government expenditure on health as percentage of total government expenditure • Number of health workers per 10,000 population • Distribution of health workers by occupation/ specialization, region and sex • Health workers newly recruited at primary health care facilities • Percentage of deaths that are registered • A national coordinated multiyear disease-specific M&E plan with a schedule for survey implementation and data analysis | <ul style="list-style-type: none"> • Annual number of graduates of health institutions/ 100,000 population • Percentage of health workers that received supportive supervision⁸ • Annual rate of retention of health service providers at public health facilities • Percentage of districts submitting timely, complete and accurate reports to the national level • Number and distribution of health facilities per 10,000 population • Number and distribution of inpatient beds per 10,000 population • Number of outpatient department visits per 10,000 population per year • General service readiness score for health facilities • Number and percentage of health facilities offering specific services • Specific service readiness score for health facilities • Percentage of facilities reporting no stock-out of antimalarial, TB, and antiretroviral drugs • Average availability of antimalarial, TB and antiretroviral drugs | <ul style="list-style-type: none"> • Percentage of suspected malaria cases that have laboratory diagnosis • Percentage of uncomplicated malaria cases receiving appropriate treatment • Percentage of women who received two or more doses of IPT during their last pregnancy • TB case notification rate • TB treatment success rate • Percentage of adults & children with advanced HIV infection receiving ART • Percentage of HIV-positive pregnant women who receive ART for PMTCT • Percentage of women attending antenatal care • Percentage of births attended by professional health provider | <ul style="list-style-type: none"> • Child mortality (neonatal, infant, perinatal) • Mortality due to major cause of death • Percentage of adults & children alive and on treatment 12-month after initiation of treatment • Percentage of infants born to HIV positive mothers who are infected rate • Confirmed malaria cases • Inpatient malaria deaths • Maternal mortality ratio • The ratio of household out-of-pocket payments for health to total expenditure on health |

8 Additional dimension of the indicator could be: percentage of facilities that report having received supportive supervision

TABLE 2.
System input/process and output indicators for monitoring and evaluating HSS

| Indicator | Frequency of reporting | Indicator level | Service delivery area | Preferred data source |
|---|------------------------|-----------------|---|--|
| Health system inputs and outputs: financing, workforce, information system, governance, and procurement and supply chain management | | | | |
| Procurement and supply chain management | | | | |
| 1. Average availability of antimalarial, TB, antiretroviral drugs in public and private health facilities | Annually | Output | Procurement and supply chain management | Facility survey |
| 2. Percentage of facilities reporting no stock outs of antimalarial, TB, antiretroviral drugs | Quarterly | Output | Procurement and supply chain management | Routine facility reporting system |
| Health workforce | | | | |
| 3. Number of health workers per 10,000 population ^{9,10,11} | Quarterly | Input | Health workforce | Administrative records |
| 4. Distribution of health workers - by doctor/nurse/midwife, urban/rural, place of work, gender) ¹⁰ | Quarterly | Input | Health workforce | Administrative records |
| 5. Health workers newly recruited at PHC facilities in the past 12 months ¹⁰ | Annually | Input | Health workforce | Administrative records |
| 6. Annual number of graduates of health professions from educational institutions per 100,000 (disaggregated by occupation, specialization and sex) ¹⁰ | Annually | Output | Health workforce | Administrative records |
| 7. Annual rate of retention of health service providers at public health facilities ¹⁰ | Annually | Output | Health workforce | Routine facility reporting system |
| 8. Percentage of health workers that received supportive supervision ¹² | Quarterly | Output | Health workforce | Routine facility reporting system |
| Information/monitoring and evaluation | | | | |
| 9. Percentage of deaths registered ¹⁰ | Quarterly | Input | Routine data collection, analysis and use | Civil registration or sample registration system |
| 10. Percentage of districts submitting timely, complete and accurate reports to the national level | Quarterly | Output | Routine data collection, analysis and use | Routine facility reporting system |
| Health financing | | | | |
| 11. General government expenditure on health as percentage of general government expenditure ^{9,10,11} | Annually | Input | Health financing | National health accounts |
| 12. Total health expenditure per capita ^{9,10,11} | Annually | Input | Health financing | National health accounts |
| Stewardship and governance¹³ | | | | |
| 13. A national coordinated multiyear disease-specific M&E plan with a schedule for survey implementation and data analysis | 2-3 years | Input | Stewardship and governance | Administrative records |

9 WHO/UNICEF. Countdown to 2015 decade report (2000–2010): taking stock of maternal, newborn and child survival. Geneva: WHO; 2010.

10 WHO. Monitoring the building blocks of health systems: A handbook of indicators and their measurement strategies. Geneva: WHO; 2010.

11 WHO. Global Health Observatory Data Repository. Geneva: WHO; 2011. Available at: <http://apps.who.int/ghodata/>

12 An alternative or proxy would be percentage of facilities that received supportive supervision.

13 This includes governance of M&E.

TABLE 2.
System input/process and output indicators for monitoring and evaluating HSS

| Indicator | Frequency of reporting | Indicator level | Service delivery area | Preferred data source |
|--|------------------------|-----------------|--------------------------------------|--------------------------------------|
| Health system outputs: service delivery (access/availability, readiness) | | | | |
| Service delivery: access/availability | | | | |
| 14. Number and distribution of health facilities per 10,000 population ¹⁰ | Annually | Output | Infrastructure | Administrative records ¹⁴ |
| 15. Number and distribution of inpatient beds per 10,000 population ¹⁰ | Annually | Output | Infrastructure | Administrative records ¹⁴ |
| 16. Number of outpatient department visits per 10,000 population per year ¹⁰ | Annually | Output | Facility management and organization | Administrative records ¹⁵ |
| Service delivery: readiness | | | | |
| 17. General service readiness score for health facilities ¹⁰ | 2-3 years | Output | Facility management and organization | Facility census |
| 18. Number and percentage of health facilities offering specific services (disaggregated by MNCH, TB, HIV and malaria) ¹⁰ | Annually | Output | Facility management and organization | Facility survey |
| 19. Specific service readiness score for health facilities ¹⁰ | Annually | Output | Facility management & organization | Facility survey |

TABLE 3.
Health outcome indicators for monitoring and evaluating health and community systems strengthening

| Indicator | Topic | Frequency of reporting | Preferred data source |
|---|---------------|------------------------|-----------------------------------|
| Outcomes: HIV/AIDS, malaria, tuberculosis, and maternal, newborn and child health | | | |
| Percentage of suspected malaria cases that have laboratory diagnosis | Malaria | Quarterly | Routine facility reporting system |
| Percentage of uncomplicated malaria cases receiving appropriate treatment | Malaria | Quarterly | Routine facility reporting system |
| Percentage of women who received two or more doses of IPT during their last pregnancy | Malaria, MNCH | 3-5 years | Population-based survey |
| Case notification rate ¹¹ | TB | Annually | Routine facility reporting system |
| Treatment success rate | TB | Annually | Routine facility reporting system |
| Percentage of adults/children with advanced HIV infection receiving ART | HIV, MNCH | Quarterly | Routine facility reporting system |
| Percentage of HIV-positive pregnant women who receive ART for prevention of mother-to-child transmission of HIV | HIV, MNCH | Quarterly | Routine facility reporting system |
| Percentage of women attending antenatal care ^{9,11,16,17} | MNCH | 3-5 years | Population-based survey |
| Percentage of births attended by a skilled health professional ^{9,11,16,17} | MNCH | 3-5 years | Population-based survey |

14 Often requires facility census of all health facilities to get these data. Data are normally stored as part of the national data base of health facilities.

15 The data are drawn from the routine health facility reporting system.

16 *Indicators for monitoring the Millennium Development Goals: definitions, rationale, concepts, and sources.* UNDP: New York. 2003.

17 *Keeping promises, measuring results.* United Nations Commission on Accountability for Women's and Children's Health, World Health Assembly, Sixty-fourth session: Geneva. 2011. Available at: http://www.who.int/pmnch/media/membernews/2011/20110519_pr_health_account_report/en

TABLE 4.
Health impact indicators for monitoring and evaluating health and community systems strengthening

| Indicator | Topic | Frequency of reporting | Preferred data source |
|--|------------------------|------------------------|--|
| Impact: Health status | | | |
| Deaths due to major cause, sex and age (Top 20 major causes of death, ICD based) ^{11,16} | HIV, TB, Malaria, MNCH | 3-5 years | Death registration, survey, census, facility reports |
| Percentage of adults and children known to be on treatment 12 months after initiation of antiretroviral therapy ^{9,11,16,17,18} | HIV, MNCH | Annually | Facility records |
| Percentage of infants born to HIV-infected mothers who are infected | HIV | Annually | Modeling |
| Confirmed malaria cases (RDTs/microscopy) | Malaria | Quarterly | Routine facility reporting system |
| Inpatient malaria deaths | Malaria | Quarterly | Routine facility reporting system |
| Maternal mortality ratio ^{16,17} | MNCH | 3-5 years Annually | Death registration, survey, census, facility reports |
| Child mortality (neonatal, infant, perinatal) ^{16,17} | MNCH | 3-5 years | Death registration, survey, census |
| Ratio of household out-of-pocket payments for health to total expenditure on health ^{9,10} | HSS health financing | 3-5 years | Population-based surveys |

2.5 Evaluation of HSS efforts

The Global Fund emphasizes the importance of conducting three types of evaluations for HSS. Countries and partners are therefore encouraged to plan and include these in HSS M&E plans:

- **Formative evaluation** is about reviewing the grant/program content and identifying areas that require reprogramming, due to the dynamics of the broader context within which the HSS efforts are implemented. During a June 2011 technical meeting on M&E of HSS hosted by the Global Fund, it was agreed that formative evaluations should be integrated in grants from the beginning, during grant negotiation or proposal development. The execution of the evaluation can be undertaken by program managers/coordinators, or could be outsourced.
- **Process evaluation** examines program implementation issues and identifies challenges that interfere with effective and efficient program delivery. Process evaluation should be integrated into grants from the beginning during grant negotiation or, ideally, at the proposal development stage. Program managers/coordinators can implement these evaluations or can outsource them as needed.

- **Impact evaluation** explores causal links between interventions and outcomes. Methodologies for impact evaluations of HSS however, have not been fully developed to guide countries and partners. Identifying the causal pathway between HSS investments and health impact is key for evaluating HSS investments. Conducting HSS impact evaluations is complex and requires specific research capabilities. Unlike formative and process evaluations of HSS, which could be executed or managed by program managers, HSS impact evaluation may require outsourcing.

Countries are therefore encouraged to integrate formative and process evaluations in their funding applications to the Global Fund. Data generated through these evaluations can contribute to the grant's performance assessments. The work on developing a methodological framework for HSS evaluation, particularly for evaluating HSS impact, is currently in progress and once finalized will be made an addendum to this toolkit.

3. M&E of community systems strengthening

The following section presents an approach for M&E of community systems strengthening (CSS) activities. Section 3.1 describes community systems strengthening activities by functional area. Section 3.2 presents a sample of indicators that can be used for reporting on community systems strengthening, including additional M&E considerations that are specific to these interventions. Information on data sources is included in Section 3.3, and evaluation of community systems strengthening is detailed in Section 3.4. Additional resources on community systems strengthening are provided in Annex 2.

3.1 Key community systems strengthening actions

1. ENABLING ENVIRONMENT AND ADVOCACY:

Communities need an enabling environment to function effectively and ensure that their rights are respected and their needs are met. The environment should also be one in which community voices and experiences can be heard and in which community-based organizations can make effective contributions to policies and decision-making. This enabling environment includes the social, cultural, legal, financial and political environments as well as the day-to-day factors that enable or hinder people's search for better health. This component has two CSS SDAs. First is monitoring and documentation of community and government interventions, in which communities effectively advocate for implementation and improvement of national programs. Well-informed communities and affected populations engage in activities to improve their own environment. The second SDA is advocacy, communication and social mobilization, in which community-based organizations have a key role to engage communities at local level.

SDA 1: Monitoring and documentation of community and government interventions: Community members and organizations are uniquely positioned to effectively monitor and document the experiences of key affected people and communities, the quality and reach of services, and the policies being implemented at community level. In order to fulfill this critical role, community-based organizations and networks need to improve their capacity to collect and analyze data, including strategic choices about which data to collect, and how to target and use the data effectively. Strong community-led documentation and monitoring will contribute to more efficient, responsive, and accountable structures at community and higher levels, providing feedback to government and civil society organizations and supporting greater cooperation and accountability. Monitoring and documentation will also contribute to engaging and empowering community members, who often feel they have a limited or no role in planning and design

of programs in which they are expected to play a role, for example in disease prevention or community health care.

Examples of activities:

- *Developing and implementing, in collaboration with other actors, plans to increase government buy-in for dealing with public health challenges;*
- *Developing and implementing, in collaboration with other actors, plans to monitor implementation of public policies and services related to health and social support;*
- *Lobbying for better governance on decision-making, policymaking and use of resources by public institutions;*
- *Participation of community actors in national consultative forums;*
- *Advocacy on legal and policy frameworks, e.g. decriminalization of behaviors or marginalized groups; development and enforcement of child protection policies;*
- *Contributing community experience and perspectives to development of national strategies, including cross-sectoral and sector-wide approaches;*
- *Mapping communication needs and planning strategies for interventions with policymakers and decision-makers;*
- *Capacity building for communication through media – radio, television, print;*
- *Developing communication materials for specific audiences, e.g. children, women and sexual minorities;*
- *Developing relationships with key partners for resource mobilization.*

SDA 2: Advocacy communications and social mobilization: Community-based organizations and networks have an important role to play in engaging with governments and other institutions at all levels (local, national, regional and global) to use well-informed dialogue and discussion to advocate for improved policies and policy implementation. In order to play this role, community-based organizations and networks need support and assistance to create and implement effective communication and advocacy plans, and to develop systems for working with partners, government agencies, media, and broader constituencies. They also have a key role in communication and social mobilization to engage communities at the local level. For example, they may advocate to change discriminatory practices, policies and laws, work for social changes that support better prevention and care-seeking, and participate in public campaigns for improved quality and reach of services. Community organizations and networks are also vital for bringing together the broader community and other stakeholders to collaborate in maintaining or improving the enabling environment. To play these roles, community-based organizations and networks need support and assistance to create and

implement effective communication and advocacy plans and to set up and implement systems to enable them to work with community members, partners, media, government and broader constituencies. Depending on local and national conditions, work on advocacy, communication and social mobilization will depend on a range of different activities, such as direct dialogue with decision-makers and influencers, community consultations and dialogues, letter-writing and petitions, use of new and traditional media and public campaigns.

Examples of activities:

- *Mapping challenges, barriers and rights violations experienced by key affected populations, and developing policy analysis, recommendations and strategies to improve the environment;*
- *Mapping existing documentation on legal and other barriers, or documenting new ones;*
- *Mobilization of communities and key affected populations to engage actively with decision-makers, and represent community issues in major discussion forums relating to health and rights;*
- *Mobilization of key affected populations and community networks to engage in campaigns and solidarity movements;*
- *Informing and empowering community members to communicate and advocate for change and improving enabling environments at local level;*
- *Conduct policy dialogues and advocacy to ensure that issues of key affected populations are reflected in the allocation of resources and in national proposals to the Global Fund and other donors, as well as in national strategic plans;*
- *Documentation of key community level challenges and barriers and development of advocacy messages and campaigns to communicate concerns of affected populations;*
- *Promote and ensure community representation in policy, planning and other decision-making bodies;*
- *Actively engaging in policy dialogue and advocacy with global, regional, sub-regional and national NGOs, major international partners such as the Global Fund, UNAIDS, Stop-TB, Roll Back Malaria and other forums such as high-level meetings relating to the Millennium Development Goals and UNGASS.*

2. COMMUNITY NETWORKS, LINKAGES, PARTNERSHIPS AND COORDINATION:

Functioning community networks, linkages and partnerships are essential to enable effective delivery of activities and services. Strong informal and formal relationships between communities, community actors and other stakeholders enable them to work in complementary and mutually reinforcing ways, maximizing the use of resources and avoiding

unnecessary duplication and competition.¹⁹ There are four CSS SDAs in this component: building community linkages; collaboration and coordination; human resources (skills building for service delivery advocacy and leadership); and financial resources and material resources (infrastructure, information and essential commodities — including medical and other products and technology).

SDA 3: Building community linkages, collaboration and coordination: Funding and support is required to build and sustain functioning networks, linkages and partnerships, improve coordination and decision-making, enhance impacts and avoid duplication of activities and services. Where local or national community and key affected population networks are weak or lack key capacities, regional networks can play a significant role in assisting with consultation and accountability of government and nongovernment actors.

Examples of activities:

- *Develop and maintain coordination mechanisms and agreements or contractual arrangements to enable community actors, community-based organizations and nongovernmental organizations to collaborate and work together;*
- *Develop and maintain coordination mechanisms agreements or contractual arrangements with partners and stakeholders at local, national, regional and international levels;*
- *Develop communication platforms to share community knowledge and experiences and support networks;*
- *Develop national partnership platforms and national level advocacy coordination mechanisms;*
- *Networking and developing partnerships between community and other actors, for access to services, particularly for the most affected population groups;*
- *Share knowledge and develop plans to involve community members and other stakeholders in the design, implementation and oversight of programs or activities;*
- *Empower community actors, particularly community-based and small organizations, to participate effectively in networking and partnerships for service delivery at local level;*
- *Develop community actor linkages to local, national, regional and international coordination bodies;*
- *Develop operational support for implementing coordination activities, such as travel, per diem, communication and overhead costs;*
- *Develop community actor linkages and collaboration in local and national coordination bodies;*
- *Create community-based networks for malaria, TB or other disease initiatives;*

¹⁹ Health & Development Networks (HDN) and the International HIV/AIDS Alliance. National Partnership Platforms on HIV and TB: A toolkit to strengthen civil society information, dialogue and advocacy. HDN and the International HIV/AIDS Alliance; 2009. Available from: <http://www.aidsalliance.org/publicationsdetails.aspx?id=430>

- *Create networking structures with local authorities, such as councils and district committees;*
- *Contribute to improved “knowledge management” by supporting, for example, sharing of information, tools, good practices, within communities.*

3. RESOURCES AND CAPACITY BUILDING:

Resources for community systems include: human resources – people with relevant personal capacities, knowledge and skills; appropriate technical and organizational capacities; and material resources, including adequate finance, infrastructure, information and essential commodities. These resources are essential for running systems and organizations, and for delivering activities and services. Human resources are the key to any intervention at community level or interventions by community-based organizations and networks. It is important to note that communities themselves provide human resources, skills and knowledge and often contribute funds, effort and materials to community programs and interventions. Communities may provide, for example, local knowledge and experience; contributions to planning and implementation processes; places to meet; food; income-generating activities; or assistance for community members to gain access to services.

Funding for core organizational costs and for building capacity are also vital for community actors to enable them to provide sustainable and effective responses as well as to fund implementation of programs and interventions. It is essential also to include funding for infrastructure items and services, information systems, and systems for sourcing and managing essential commodities.

SDA 4: Human resources — skills-building for service delivery advocacy and leadership: Skills-building for service delivery includes organizational skills and management to ensure timely and efficient operational support for services. Technical capacity of community actors needs to be built so that they can develop and deliver effective community-based services and can ensure that communities are well-informed and supported for access to, for example, services, referrals, follow-up and adherence. These resources also need to be backed up with technical skills for documenting experiences and engaging in community research methodologies to determine what works best for communities. Individuals with the capacity for leadership will also need to gain skills such as negotiation, multi-stakeholder collaboration and public speaking. Community actors also need to have appropriate understanding of human rights, especially for key affected populations. Capacity building will be needed to ensure that the actors understand community health, social and other challenges, and that they are able to understand and make effective use of interventions designed to improve people’s health knowledge and behaviors as well as their access to and use of services.

Examples of activities:

- *Technical capacity building for health support roles, including treatment adherence, peer counseling, HIV counseling and testing, DOTS, malaria prevention, newborn and child health, provision of immunization services, and nutrition;*
- *Development and implementation of referral and support networks and systems;*
- *Planning for continuous improvement of quality services through mentoring, updating of skills and information and regular reviews of service availability, use and quality;*
- *Training in special technical areas such as child protection, social protection, working with criminalized or marginalized communities, providing integrated TB/HIV services, drug resistance, and community audits (including verbal autopsies);*
- *Documentation and dissemination of good practice examples;*
- *Building new technical capacities to enhance the delivery of integrated services such as TB/HIV, SRH, comprehensive PMTCT, maternal and child health;*
- *Capacity building on appropriate research methods e.g. operational research methodologies;*
- *Capacity and skills building to enable personnel to work effectively, safely and ethically;*
- *Mentorship for providing quality technical support;*
- *Development of linkages and programs for training and supervisory support by regional networks or national bodies;*
- *Planning for continuing skills development and review, for example, seminars and meetings; access to up-to-date information; professional and mentoring support; and strengthening professional networks, e.g. for counselors, TB outreach workers, and malaria prevention educators;*
- *Development of communication, participation and leadership skills for working with communities and individuals, and implementing local advocacy initiatives;*
- *Capacity building on the use of new and traditional communication technologies for advocacy and service delivery (e.g. adherence support and follow-up);*
- *Training of trainers on challenging stigma, discrimination and harmful sociocultural practices;*
- *Advocacy on legal and policy frameworks, e.g. decriminalization of behaviors or marginalized groups and the development and enforcement of child protection policies;*
- *Training for community actors and stakeholders in partnership building and collaborative approaches to policy and advocacy work;*
- *Leadership training for policy and advocacy roles and community representation at national levels;*
- *Increasing community actor knowledge of policy issues and broader social, cultural, political and economic determinants of health;*
- *Developing documentation, reporting and dissemination skills.*

SDA 5: Financial resources: This SDA concerns support for better mobilization, management and effectiveness of financial resources. This support is required to enable actors to plan for and achieve predictability of financial resources for start-up, implementation and scale-up. It is also necessary for the longer-term sustainability of community interventions and for working successfully toward improved outcomes and impacts. It includes identifying and leveraging existing sources of finance (and staffing), but without engaging in undue competition with other actors.

Examples of activities:

- *Assessing the level of funding required for CSS and service delivery;*
- *Advocating for CSS funding from governments and donors;*
- *Hiring, training, supervising and mentoring resource mobilization staff;*
- *Planning for funding based on organizational development and programmatic needs identified by members and supporters;*
- *Proposal writing and accounting for and planning activities;*
- *Capacity building for financial management, including bookkeeping, accounting, reporting, use of bank accounts, and the acquisition and use of accounting software;*
- *Capacity building on oversight of resources and budgets, and the design and implementation of internal accountability systems;*
- *Hiring external auditors to support accountability to communities and funders;*
- *Capacity building on resource mobilization, including leveraging existing resources without creating competition across various projects or geographical areas and the role of policies and processes relating to global health initiatives;*
- *Development and management of small grant schemes for communities, including core support such as social transfers for vulnerable people, social welfare services, child protection and health-related income-generating activities;*
- *Development and management of schemes for remunerating community outreach workers and volunteers or providing other incentives and income-generation support.*

SDA 6: Material resources — infrastructure, information and essential commodities (including medical and other products and technology):

This SDA focuses on capacities by all actors for: forecasting, quantification, sourcing, management and appropriate use of materials. Materials include all necessary organizational infrastructure items and supplies, and any items needed for operational activities and service delivery, for example, transport and office essentials. Essential commodities range from simple stationery items such as notepads and pencils through campaign and information materials to medicines, dressings, insecticide-treated nets, and condoms. Some actors and interventions may have limited needs for material resources and will only need very simple systems for dealing with them. More developed systems will be needed if large quantities and expenditures are involved and there will need to be greater attention to management, maintenance and security of such supplies. However, the basic principles of managing material resources are the same, whatever the size of the system.²⁰

Examples of activities:

- *Development and management of systems for calculating needs and monitoring usage of material resources;*
- *Selection of appropriate methodologies for replenishing supplies according to size of organization and programmatic context;*
- *Physical infrastructure development, including obtaining and retaining office space and equipment, improving communications technology, provision and maintenance of transport;*
- *Training in skills, good practice and quality standards for sourcing, procurement and supply of consumables (especially medicines and health goods);*
- *Training in skills, good practice and standards for ensuring good quality infrastructure materials and essential commodities, including supplier selection, storage and distribution, preventive maintenance of buildings, computers, office equipment and transport;*
- *Planning, management systems and provision of essential medical and other supplies for service delivery such as medicines, lab reagents, syringes, needles, condoms and other consumables, X-ray machines, and microscopes;*
- *Developing and implementing systems to routinely record community experiences and disseminate good practices and lessons learned;*
- *Developing appropriate community-level information and knowledge management systems;*

²⁰ The following resources are available for more information on procurement and supply management:

- PSM (procurement and supply management toolbox). Available from: <http://www.psmtoolbox.org/en/>
- WHO. Handbook of supply management at first level health care facilities. Available from: <http://www.who.int/hiv/amds/HandbookFeb2007.pdf>
- Management Sciences for Health (MSH). Managing TB medicines at the primary level. Arlington, VA: MSH; 2008. Available from: http://erc.msh.org/toolkit/toolkitfiles/file/TB-Primary-Level-Guide-April-2008_final-English.pdf
- John Snow/DELIVER. Guidelines for the storage of essential medicines and other health commodities. Arlington, VA: John Snow/DELIVER; 2009. Available from: http://deliver.jsi.com/dlvr_content/resources/allpubs/guidelines/GuidStorEsse_Pock.pdf

- *Establishing information centers and online information access systems;*
- *Packaging of information and lessons learned to disseminate as evidence of good practices;*
- *Training and mentoring in information management (paper-based or computer-based);*
- *Training and mentoring in the use of information and communication technologies.*

4. COMMUNITY ACTIVITIES AND SERVICE DELIVERY (access and availability):

Community activities and services are essential for achieving improved health outcomes. Therefore, they are an essential and integral component of community systems strengthening. "Learning by doing" is an important capacity building principle of (and is especially applicable to) systems for service delivery and support at community level. Quality community programs, activities and services that are evidence-informed and cost-efficient will build on existing systems and services and contribute to the creation of demand for services, social behavior change, increased health, and reduced disease transmission in the community. Community-based organizations and members of key affected communities are in a unique position to assess and address the needs of their own people. This is especially true for marginalized people who are criminalized or stigmatized and who may therefore avoid services through the public sector. This brings greater credibility and relevance to community service delivery systems and strengthens leadership and advocacy. It is therefore essential to support community actors in building and strengthening community systems to deliver services and to support communities to use those services.

A quality approach should underlie the design and implementation of community service delivery systems, from situation assessment and intervention design right through to delivery and assessment of outcomes and impacts. This depends on having a sound basis of informed management and technical skills and the ability to utilize evidence of what works. Systems for service delivery should also be implemented ethically and sustainably by people who are appropriately skilled and knowledgeable. Systems should be based on accepted national or other standards of practice where they exist and should be linked with national health, social care and M&E systems and standards. It may be necessary for community actors to advocate for and initiate development of new practice standards if none exist already. Adaptability of services is important for responding to changes in institutional capacity and resources, patterns of disease, new knowledge on prevention, care and support, or changing demographics and political or social environments.²¹

There are many interventions, particularly support activities for community members accessing health-related services at the community level, that may fail to acquire funding because of differing views on whether they fit within community systems or health systems. It is important not to lose sight of the fact that, wherever they fit, they are essential services for people in need. Delivery through community systems may be the most effective and acceptable to a community even for interventions clearly related to health. Many community-based programs are moving towards integrated delivery of services — the same person on the same day may deliver both health and nonhealth interventions for a range of health and other challenges. It is therefore logical that funding and monitoring should also be integrated for the community actors responsible for delivery. Funding for research should also focus on the added value that such services and activities can provide, ensuring better planning, implementation and quality improvement based on validated evidence.

SDA 7: Community-based activities and services — delivery, use and quality:

Well-planned and implemented community-based services can deliver effective, safe, high-quality and accessible interventions on an equitable basis to those who need them, for example prevention, care and treatment of HIV, TB and malaria. They will also deliver interventions aimed at mitigating the effects of disease on individuals and communities, including care and support of children and other vulnerable people (such as people who use drugs, pregnant women and prisoners). Access, equity and quality, along with rights-based programming and harm reduction, are key concepts in the delivery of community-based services. It must be ensured that national guidelines for key community activities and services are developed in order to ensure that minimum standards for quality are met, while also recognizing that not all community activities will be included in a set of national standards. Community systems therefore need to be strengthened not only to plan and provide services but also to implement and develop standards and protocols, provide supportive supervision, and ensure continuous quality improvement. Functional and efficient systems are therefore vital for delivery of these community-based interventions, including quality assurance. Community actors will need appropriate support and technical assistance to identify what systems are in place or needed to fill gaps, and to develop systems that maximize use of resources and deliver quality services to target populations. They will also need to develop the technical capacity to implement existing national or other standards and to adapt them or develop new standards where new approaches and activities are being implemented. Systems for supportive mentoring and supervision will also be needed in order to ensure continuing quality in service delivery.

²¹ Makhubele MB, Parker W, Birdsall K. Strengthening community health systems: Perceptions and responses to changing community needs. Johannesburg: Centre for AIDS Development, Research and Evaluation (CADRE); 2007. Available from: <http://www.cadre.org.za/node/197>

Examples of activities:

- *Mapping community health and social support services and their accessibility to end users;*
- *Identifying and ensuring availability and implementation of national or other relevant guidelines for delivering quality services;*
- *Identification of services and activities where good practice standards are not available or need to be adapted, and developing strategies to address such gaps in ways appropriate to community service delivery and systems;*
- *Mapping of available knowledge and analyzing information sources, flows of information and gaps that need to be addressed to improve decision-making and implementation at national, local and community levels;*
- *Developing and using knowledge management systems, including information centers, in order to share experience and good practice and inform planning and implementation of quality service delivery;*
- *Identification of populations most at risk and most in need of services;*
- *Identification of obstacles to accessing and using available services;*
- *Participatory development and implementation of referral systems to ensure access to and use of services, and re-referral to community systems for ongoing support;*
- *Planning for community-based service delivery based on mapping and analysis of needs and gaps;*
- *Planning for continuous improvement of quality services through mentoring, updating skills and information, and regular reviews of service availability, use and quality;*
- *Development of integrated service delivery systems to address the range of health, social and related needs in communities, for example: comprehensive home-based care systems, counseling and psychological support systems, including peer-led counseling and self-support groups; social, family and economic support systems; systems to provide support to individuals for service use and follow-up, including accompaniment, translation, locating and accessing further services;*
- *Development of community support centers providing a range of services such as information, testing and counseling, referrals, peer support, outreach to key affected people and communities, and legal support;*
- *Development of systems to create demand for improved access to and use of health, social welfare, legal and other services and advancing the health and other rights of key affected populations, including community treatment and health literacy campaigns and community education to prevent stigma and discrimination;*
- *Development of peer education and community outreach programs to support key populations at risk, especially excluded and vulnerable populations.*

5. ORGANIZATIONAL AND LEADERSHIP STRENGTHENING:

Organizational strengthening is a key area, aiming to build the capacity of community-actors to operate and manage the core processes that support their activities — developing and managing programs, systems and services effectively; ensuring accountability to their communities, stakeholders and partners; and providing leadership for improving the enabling environment to achieve better health outcomes. Key knowledge and skills in this area would include, for example, leadership in representing the vision and goals of the organization externally and internally, development of systems of accountability and participation in decision-making, management of workers and respect for employment rights and laws.

There is particular need to strengthen support and funding for networks and small organizations at the community level, such as those of people living with and affected by HIV or other key health problems. Funding has in the past been limited mainly to specific projects, advocacy and profile-raising opportunities and there has been little support for developing organizational capacity or increasing knowledge and skills for a wider health support role. This pattern needs to change, in order to strengthen the effectiveness of community systems. In some countries there may be more than one network in existence, or there may be several strong networks, community-based organizations (CBOs) or nongovernmental organizations (NGOs) working in the same field, and they may need support to work together to avoid duplication of activities and promote joint planning and decision-making.

Accountability is an important aspect of strengthening organizations, assuring communities, stakeholders and partners that there is good stewardship of the organizations' resources. Mechanisms for independent oversight and guidance may be needed to demonstrate this, for example: meetings with stakeholders and community members; independent audits of finances and evaluations; open access to information and reports for stakeholders, community members and funders on a regular basis. Community organizations that hold themselves accountable to their communities will also build their capacity to engage in advocacy for greater transparency and accountability of public bodies and governments to communities.

SDA 8: Management accountability and leadership:

Resources and technical support may be needed to build the capacity of organizations to support delivery of the proposed range and quality of activities and services. This includes capacity for long-term strategic planning, management, sustainability, scaling-up and responding to change through the development of organizational systems and the capacity for strategic planning, monitoring and evaluation, and information management.

Examples of activities:

- *Organizational capacity assessment;*
- *Organizational/management support and training for small and new NGOs/CBOs;*
- *Developing capacity for negotiating and entering into agreements and contractual arrangements, such as memoranda of understanding, terms of reference and supply contracts;*
- *Develop capacity and plans for human resource recruitment, including technical support systems and organizational needs;*
- *Develop plans for managing and building capacity of human resources, including job descriptions, career development plans, and staff handbooks, to support and retain staff and volunteers;*
- *Develop key skills, for example, writing official reports, letters and proposals;*
- *Develop systems for training, mentoring and experience sharing for leadership, organizational development, management and accountability;*
- *Regularization of legal status (when appropriate) and authority to enter into agreements (for example, opening bank accounts, building leases, purchasing property);*
- *Increasing transparency and accountability through meetings with stakeholders and community members; independent audits of finances and evaluations; open access to information and reports for stakeholders, community members and funders on a regular basis;*
- *Training and ongoing mentoring and supervision for program and information management;*
- *Develop capacity for project design and strategic planning as well as project cycle management;*
- *Provide support for making business plans self-sustainable (management training);*
- *Recruitment, management and remuneration of staff, community workers and volunteers;*
- *Support newsletters for internal circulation to keep staff informed, creating a shared vision;*
- *Communication of shared vision among the organizations and sustaining motivation;*
- *Strengthening community leadership, including shared leadership;*
- *Developing capacity building systems.*

6. MONITORING AND EVALUATION AND PLANNING:

Community-led M&E is essential for community systems. It provides the strategic information needed to make good decisions for planning, managing and improving programs, and for formulating policy and advocacy messages. It also provides data to satisfy accountability requirements. Community-led M&E will make effective use of data provided by community members. These include data from qualitative and participatory methodologies, such as action research, operational research, focus groups and key informant interviews, as well as data from regular monitoring of operational inputs and outputs and internal or external evaluations. This means that both qualitative and quantitative indicators are needed, that community-level M&E methodologies are essential, and that feedback mechanisms must routinely be used to allow community organizations and community members to use M&E results for reflection and further planning and action.^{22,23}

Data collection and analysis should also follow a gender- and age-related approach to better understand the different vulnerabilities and needs of women and girls, men and boys, and transgender people. For example, gender norms affect women's and men's risks of exposure to mosquitoes and malaria due to divisions of labor, leisure patterns and sleeping arrangements. This also affects treatment-seeking behaviors and household decision-making, resource allocation and financial authority.²⁴

The first steps for building or strengthening community systems are also essential for building a meaningful M&E system: definition of target groups and areas; stakeholder identification and consultation; assessment of needs and analysis of gaps and available resources. This will inform discussion about what can realistically be done to fill the gaps, who should be involved and how to make it happen, based on clear and achievable objectives. During implementation, regular review of implementation will help in analyzing progress and answering key questions such as:

- *Are we doing the right things?*
- *Are we doing the right things well?*
- *Are we doing enough of the right things?*
- *Have our interventions made a difference, and how do we know?"²⁵*

For example, a focus group discussion among injecting drug users might reveal that a needle exchange service would have more impact by distributing syringes of

22 Davies R, Dart J. The 'Most Significant Change' (MSC) Technique – a guide to its use. CARE International et al.; 2005. Available at: <http://www.mande.co.uk/docs/MSCGuide.pdf>

23 The Constellation. Self-assessment tools on HIV, malaria and other community issues. The Constellation; 2008. Available at: <http://www.communitylifecompetence.org/en/94-resources>

24 WHO et al. Gender, Health and Malaria. Geneva: WHO & RBM; June 2007. Available at: <http://www.rollbackmalaria.org/globaladvocacy/docs/WHOinfosheet.pdf>

25 "If you do not measure results, you cannot tell success from failure; if you cannot see success, you cannot reward it; if you cannot reward success, you are probably rewarding failure; if you cannot see success, you cannot learn from it; if you cannot recognize failure, you cannot correct it; if you can demonstrate results, you can win public support." Cited on the World Bank GAMET site at: [http://gametlibrary.worldbank.org/pages/12_1\)HIVM_ESystems-12components_English.asp](http://gametlibrary.worldbank.org/pages/12_1)HIVM_ESystems-12components_English.asp)

a size preferred by drug users, a fact that would not be detected in quantitative data on the number of syringes distributed. Evidence of the effectiveness of a changed approach could be validated through the design and implementation of an operational research project, thus adding significant new data to the existing evidence base.

An effective community-level M&E plan provides a structure for collecting, analyzing, understanding and communicating key information throughout the life of an intervention or program. The plan should cover the wide range of actions and processes, from gathering information for planning activities and interventions, through designing and implementing workplans, reviewing progress and evaluating what has been done as well as communicating results to implementers, communities, stakeholders and funding partners. It is highly recommended that community M&E systems should be aligned with the national health and social welfare M&E systems and with the legal and policy environment. This will ensure that reporting to the national level contributes to national data and is also incorporated into the local system without creating extra burdens of data collection and analysis.

It is also essential to build up systems for community-level knowledge management. This includes data from the M&E system and from formal and experiential research, based on the experiences of communities and key affected populations. A good knowledge management system will enable community actors and key affected populations to establish evidence of what works and does not work at the community level so they can respond effectively to political, social and economic challenges, and address behaviors, rights violations and other factors that drive the need for improvements in health and social care and the surrounding environments. It will also provide community members with access to news, information on good practices, information on available tools and technical assistance opportunities, information about policy and opportunities to engage in policy dialogue and network with each other.

SDA 9: Monitoring and evaluation, evidence-building: Community organizations often have limited human and material resources for building and operating M&E systems. They lack training in M&E, and can be seriously overburdened because of multiple reporting requirements, high staff turnover, unreliable electricity and limited infrastructure such as computers or other equipment. Much work also needs to be done, in terms of supervision and planned training, to put in place effective systems to strengthen M&E capacity at the community level. For example, an important step

would be to increase support from the national level for systematic involvement of civil society organizations in national strategies. Currently many community organizations are registered with departments other than health, which makes integration into health M&E difficult. Much work remains to be done to ensure that all actors work together in integrated national disease programs.

Larger organizations may already be familiar with M&E processes but lack sufficient capacity; smaller groups and organizations may be unfamiliar with them and will need ongoing support to develop and implement M&E successfully.²⁶ Existing actors, systems and resources need to be clearly identified to correctly plan and target interventions, aiming at “added value” and avoiding unnecessary duplication of efforts and activities. This will include having up-to-date information on what works for specific populations and communities in order to make new interventions as evidence-informed as possible.

Where formal evidence for interventions is lacking, it will be important to include research within implementation plans, for example operations research, in order to strengthen the evidence base. Community knowledge management contributes to evidence building and access to key information. It enables the sharing of community knowledge both within communities and with a wider range of stakeholders. It contributes to translating knowledge into policy and action, to sharing and applying knowledge based on experience both at local level and with policy and program decision-makers at national, regional and international levels. Community organizations will need funding for knowledge management activities such as the development of communication platforms; gathering, collating and disseminating good practices and useful tools; making use of opportunities to promote networking and the development of “communities of good practice.”

Examples of activities:

- *Recruitment of M&E staff / ensuring staff capacity to implement M&E activities;*
- *Orientation of community groups, stakeholders and staff at start of program to ensure their buy-in and participation in situation analysis;*
- *Capacity building in analysis of community situations, sources of vulnerability, resources, strategic partners, gaps and obstacles to accessing and using available services;*
- *Capacity building on rights, participation and protection for working with children and other vulnerable adults and youth, for example, in performing situation analysis, collecting qualitative data on outcomes, documenting experiences;*

²⁶ There are many guides to M&E and project management. A highly developed guide can be found at: http://gametlibrary.worldbank.org/pages/25_Introduction_Background_English.asp

- *Community monitoring and evaluation of service quality, including linkage and referral systems, and clinical services;*²⁷
- *Training, mentoring and supervision for monitoring and evaluation, including development and use of simple-to-use standardized records and registers for essential data;*
- *Developing capacity for design and implementation of data collection, service user interviews, desktop reviews;*
- *Developing capacity for analyzing data, and identifying and documenting key information and lessons learned;*
- *Training in analysis and use of available data such as surveys of key affected populations;*
- *Use of participatory research methodologies such as action research, operational research, use of focus groups, and interviews;*
- *Exchange visits and peer-to-peer learning and support on community M&E.*

SDA 10: Strategic and operational planning:

Assessment of needs and analysis of gaps and available resources at community-level are essential first steps for community actors. Community needs and resources vary between communities and among key affected populations, for example drug users, sex workers and older people. Existing information sources need to be researched in order to link community assessment findings with national plans and strategies, with available guidance for interventions, and with research that provides supporting evidence for addressing evident needs and gaps.

Strategic planning helps to clarify what is to be done, why it is being done, what are the goals and what key activities and resources will be required to achieve the goals. An operational plan or workplan is important for community planning. It is based on a strategic plan and provides specific details, timelines and budgets for implementation of activities and programs. Clearly, these planning processes depend on having available sufficient and accurate information about the community to be served, the national and local contexts in which interventions will happen, the resources available, and other factors. Effective planning should always be based on prior analysis and information gathering.

Small groups and organizations may use a simplified approach for strategic planning, but the steps required are very similar whatever the size of organization. First, it is important to decide how the process will work – who will be involved, how decisions will be made, and what timeline to follow to finalize the plan. Then there needs to be consensus on what is important to the organization and what

it wants to achieve for the community. Are its values and community vision directed toward equality for women and girls, for example, or a community in which no one dies of malaria? This consensus will enable the group or organization to define its mission – the contribution it aims to make to the community – and specific goals and targets to achieve this. It will then be possible to start analyzing and costing resources and developing a timeline for implementation.

Evidence-based operational plans for implementation, based on the strategic plan, will include activities and budgets for defined periods, for example 6 or 12 months at a time. Other plans should also be developed from an early stage to support the organization and program implementation, for example plans for management and human resources, monitoring and evaluation, operations research, and documentation of good practice, resource mobilization, procurement and supply management, strategic communications, technical assistance and capacity building.

Examples of activities:

- *Assessment of service gaps;*
- *Assessment of what personnel will be needed for interventions, what attributes, capacities and skills they need to have, and what resources will be needed to support them;*
- *Mapping health and social support actors and services, service providers and networks, and understanding their roles in the target community;*
- *Reviewing and sharing national plans, strategies and policies relevant to proposed activities and communities;*
- *Developing community-level M&E and operational plans, including reporting systems, regular supervision, mentoring and feedback to community actors and stakeholders;*
- *Capacity building on participating in and understanding research affecting communities, and putting relevant research findings into practice;*
- *Identification and development of plans for capacity building and technical assistance;*
- *Development of organizational and technical capacity building plans;*
- *Development of plans for regular reporting and communication to government, stakeholders, community and partners;*
- *Orientation for program staff on program vision, objectives, plans and policies at the start of the program and when new staff or volunteers commence work;*
- *Training and support for development of community actors' strategic and operational plans, linked to national strategies and plans.*

²⁷ See for example: *Operations Manual for Delivery of HIV Prevention, Care and Treatment at Primary Health Centres in High-Prevalence, Resource-Constrained Settings* – especially Chapters 4 & 6. WHO IMAI Team Dec 2008; Available at: http://www.who.int/hiv/pub/imai/operations_manual/en/

3.2 Key issues and considerations for M&E of CSS in Global Fund grants

Proposed indicators, data sources and program reviews or evaluations for community systems strengthening are drawn largely from Community Systems Strengthening Framework, August 2011.²⁸ Countries are encouraged to refer to this resource for additional information.

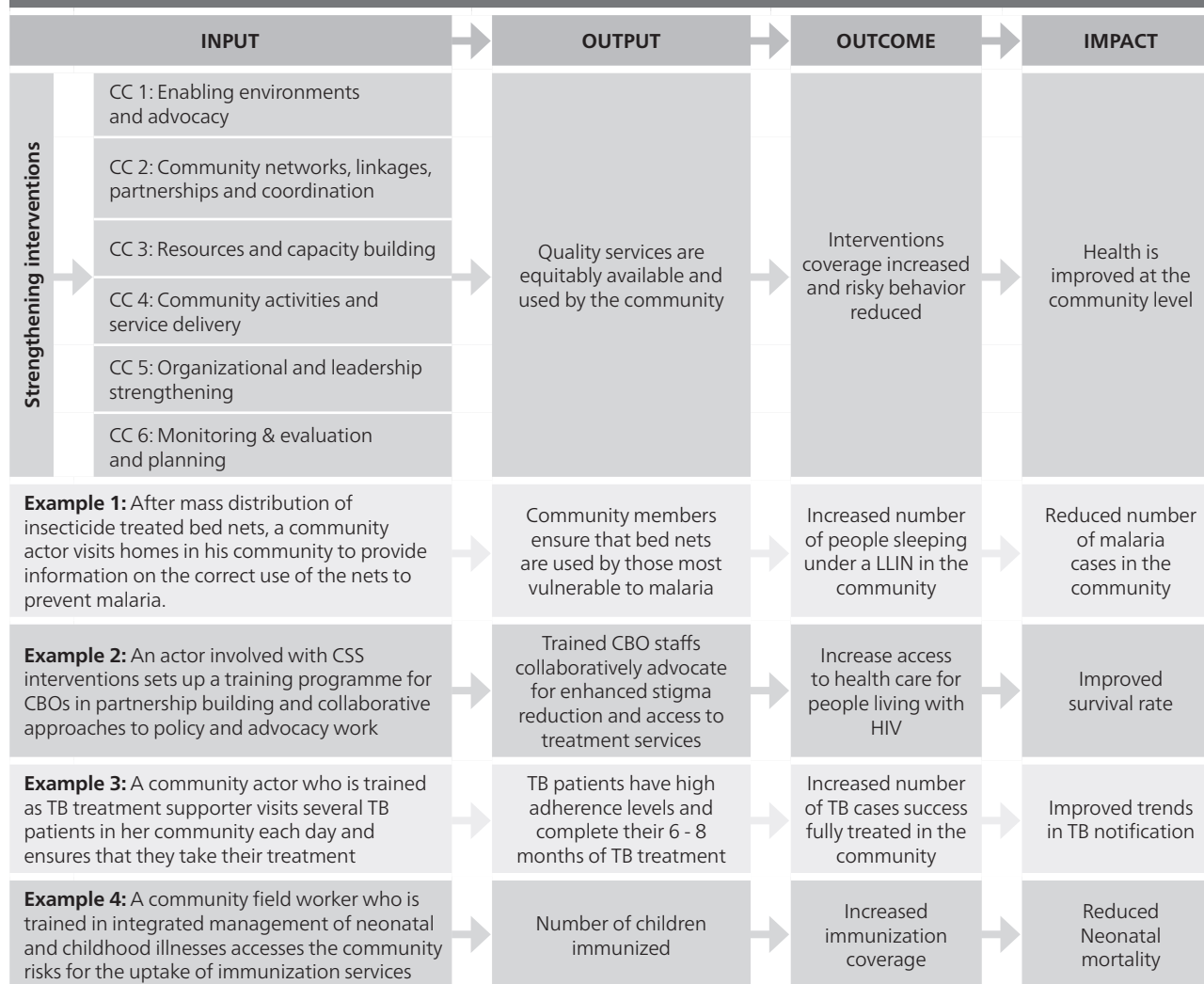
The selection of indicators for use at the country level to track progress in community systems strengthening interventions should be guided by the understanding that CSS and all related actions are geared at improving service delivery, increasing coverage and ensuring equitable distribution of these services for improved health outcomes. In addition, the implementation of community-based activities and services is in collaboration with other sectors and specifically for the health sector, in complementarity by the public health sector as part of one holistic health system. It is therefore important

to view CSS actions and community-based activities and service provision as part of the continuum of health care (see Figure 3).

Disease outcome and impact level indicators are presented in Table 5 on page 291. When interpreting these indicators, it is critical to recognize that CSS efforts need to be implemented collaboratively with relevant disease program interventions and HSS efforts to produce these health outcomes. The CSS indicators should incorporate “people-reached with services” indicators under HIV, TB or malaria that will lead to health outcomes and to long-term impacts on these diseases.

The disease-specific indicators that measure people reached with services by community-based organizations remain within the respective disease components of the M&E toolkit and can be accessed in Parts 2, 3, and 4 of the toolkit.

FIGURE 3.
CSS results framework



CC = core component (from CSS Framework document)

28. CSS Framework is available from: www.theglobalfund.org/documents/civil_society/CivilSociety_CommunitySystemsStrengthening_Framework_en

3.2.1 Selection of indicators

This section contains 29 process and output indicators for CSS that have been developed through a series of consultations with a large number of stakeholders representing key affected populations, community-based organizations and implementers, governments and various international bilateral and multilateral organizations. The set of 29 indicators will provide the basis for monitoring and building evaluation evidence for CSS interventions (Table 5). These are divided into core (Table 6 on page 292) and additional indicators (Table 7 on page 293), see section 3.2.2 for more information.

The outcome and impact indicators provided in Tables 5, 8 and 9 are the same as those used to measure outcome and impact of health systems strengthening. As outlined in Section 1 of this part of the toolkit, CSS and HSS actions are closely linked and their impact can be seen using the same indicators at these levels.

Caveat: *The list of indicators contained in this document is work in progress. Many of the indicators are newly developed and have not been field tested or used in practice. Only 5 out of the 29 indicators are known to be in use in certain regions even though data have not been specifically collected and analyzed for indicator quality. The immediate next step is to launch a comprehensive field testing exercise of the whole indicator set in representative settings globally. It is anticipated that the data that will be collected through the Global Fund grants will feed into the field testing exercise and facilitate the fine-tuning of the indicator set.*

3.2.2 Core indicators and additional indicators classification

The set of process and output CSS indicators have been classified either as core (Table 6 on page 292) or additional (Table 7 on page 293). The core indicators are the most important for monitoring progress under CSS and it is strongly recommended that countries incorporate these into their CSS programs as appropriate to facilitate a basic understanding of the progress under CSS. There are 10 core indicators that have been drawn from each service delivery area across the six CSS components. Within the context of Global Fund architecture of performance-based funding, core sets of indicators called "Top 10" are identified within the disease programs. The indicators are predominantly "people reached with services" types of indicators and they are weighted more heavily within the grant rating system. The CSS core set of indicators will also serve as "Top 10" equivalent. For more information on the Top Ten Equivalent indicators, please see Part 1 of the toolkit. Please refer to Table 6 on page 292 for an overview of the recommended core CSS indicators.

The 19 additional indicators will help programs collect a broader range of information to track progress of CSS interventions. Countries are encouraged to incorporate these into their programs as necessary and as M&E systems and resources may permit. Please refer to Table 7 on page 293 for an overview of the additional CSS indicators. For each of the indicators more detailed definitions have been developed. These can be found in the CSS framework document.

3.2.3 Definition of the denominator

This section outlines the considerations that should be applied to appropriately adjust the denominator of recommended indicators that are related to community-based organizations or staff/volunteers.

Community-based organizations: Many of the indicators focus on community-based organizations. While acknowledging the important role of community-based organizations in delivering services to the community, it is also important to acknowledge that other actors contribute to this process. Examples of other organizations involved in service delivery to the community are: private-sector organizations, nongovernmental organizations or local government authorities. CSS interventions may focus on community-based organizations, but also on these other types of organizations. When working with other types of organizations, it is important to adjust the indicators and reflect the link between these organizations and the community.

Many of the indicators have "total number of targeted community-based organizations or all community-based organizations in a targeted area" as their denominator. It is essential to adjust this denominator to the specific CSS program. The denominator should be determined in step 1 of the development of a system for CSS. Furthermore, it is important to strengthen community systems as a whole and not to focus only on a limited number of community actors or organizations. Examples of adjusted denominators could be:

- *All community-based organizations with less than 100 staff members or volunteers in district x that are involved with prevention, care or treatment services for HIV/AIDS.*
- *All organizations in province x supporting TB patients' adherence to treatment including CBOs, NGOs, faith-based organizations, and private-sector organizations.*
- *All community-based organizations in country x that work with orphans and vulnerable children.*

Staff/volunteers: A large proportion of community services are delivered by volunteers. It is recognised that volunteers contribute considerable added value to improving health outcomes at the community level. However, for the purpose of indicator formulation, the volunteers have been removed. It is recommended that data be collected and aggregated by staff or volunteer positions for all indicators focusing on organizational staff. There is only one exception to this recommended disaggregation: to staff responsible for monitoring and evaluation. This is to ensure that this key organizational function is strengthened. Community volunteers may include a range of nonhealth workers, such as office workers, drivers, and activity organizers. They may also include a variety of health workers such as peer educators, community health outreach workers, DOTs coordinators, village health workers, malaria village workers, home-based care providers, outreach workers, health educators, health promoters and other volunteers in accordance with the individual country's definition.

TABLE 5.
Global Fund-recommended indicators for monitoring and evaluating CSS

| Health system inputs & processes | Health system outputs | Health outcomes (coverage & risk factors) | Health impact |
|---|--|---|--|
| <p>Enabling Environment and Advocacy</p> <ul style="list-style-type: none"> • CBOs/networks meaningfully participating in joint national program reviews • Community led advocacy campaigns that saw a targeted policy change • CBOs/networks that have documented and publicized barriers to equitable access to health services <p>Community networks, linkages, partnerships and coordination</p> <ul style="list-style-type: none"> • Percentage of CBOs that are represented through membership in national or provincial level technical or policy bodies • Percentage of CBOs that implemented at least one documented feedback mechanism with the community they serve in the last six months <p>Resources and capacity building</p> <ul style="list-style-type: none"> • Percentage of volunteers that are provided with incentives • Percentage of CBOs that keep accurate data for inventory management • Percentage of CBOs that maintain adequate storage conditions and handling procedures for essential commodities <p>Community activities and service delivery</p> <ul style="list-style-type: none"> • Percentage of CBOs that implemented activities contributing to the national disease strategic plan <p>Leadership and organizational strengthening</p> <ul style="list-style-type: none"> • Percentage of staff of CBOs with written terms of reference and defined job duties <p>Monitoring & Evaluation and planning</p> <ul style="list-style-type: none"> • Percentage of CBOs with at least one staff member in charge of M&E • Percentage of CBOs using standard data collection tools and reporting • Percentage of CBOs conducting documented reviews of their own program performance according to their strategic plan • Percentage of CBOs with a developed strategic plan covering 2 to 5 years • Percentage of CBOs that are implementing a budgeted annual workplan | <ul style="list-style-type: none"> • HIV, TB, malaria and immunization service organizations with referral protocols in place • Percentage of staff members that have worked for the organization for more than 1 year • Percentage of CBOs that received supportive supervision in accordance with national guidelines • Percentage of CBOs that have a complete and sound financial management system • Percentage of CBOs that have secured core funding • Percentage of CBOs submitting timely, complete and accurate financial and programmatic reports to the national level • Percentage of CBOs that deliver HIV, TB, malaria and immunization services • Percentage of CBOs reporting no stock-out of HIV, TB, malarial or immunization essential commodities • Percentage of people with access to community-based HIV, TB, malaria or immunization services in a defined area • Percentage of community health workers who received training or retraining in HIV, TB, malaria or immunization service delivery • Percentage of CBOs with staff responsible for stock management • Percentage of CBOs with staff in managerial positions trained or retrained in management, leadership or accountability • Percentage of CBOs with received technical support for institutional strengthening • Percentage of CBOs with at least one staff member in charge of M&E trained or retrained in M&E | <ul style="list-style-type: none"> • Suspected malaria cases that have laboratory diagnosis • Uncomplicated malaria cases receiving appropriate treatment • Women who received two or more doses of IPT during their last pregnancy • Case notification rate • Treatment success rate • Percentage of adults/children with advanced HIV infection receiving ART • Percentage of HIV-positive pregnant women who receive ART for PMTCT • Percentage of women attending antenatal care • Percentage of births attended by professional health provider | <ul style="list-style-type: none"> • Child mortality (neonatal, infant, perinatal) • Mortality due to major cause of death • ART 12 months retention rate • PMTCT transmission rate • Confirmed malaria cases • Inpatient confirmed malaria cases • Maternal mortality ratio • The ratio of household out-of-pocket payments for health to total expenditure on health |

TABLE 6.
Top 10 recommended core process and output indicators for monitoring and evaluating CSS efforts

| Core component | Service delivery area | Indicators | Data source | Frequency |
|---|--|--|---|-------------------------|
| Core component 1: Enabling environments and advocacy | SDA 1: Monitoring and documentation of community and government interventions | Number of community-based organizations and/or networks that have meaningfully participated in joint national program reviews or evaluations in the last 12 months (1.1) | Administrative records and evaluation reports | Annually |
| | SDA 2: Advocacy, Communication and Social mobilization | Number of community-led advocacy campaigns that saw a targeted policy change or can clearly document improved implementation of an existing (targeted) policy within 2 years of the start of the advocacy campaign (2.1) | Administrative records | 2 years |
| Core component 2: Community networks, linkages, partnerships and coordination | SDA 3: Building community linkages, collaboration and coordination | Number and percent of community-based HIV, TB, malaria and immunization service organizations with referral protocols in place that monitor completed referrals according to national guidelines (3.1) | Administrative records | Quarterly/ semiannually |
| Core component 3: Resources and capacity building | SDA 4: Human resources: skills building for service delivery, advocacy and leadership | Number and percentage of staff members and volunteers currently working for community-based organizations that have worked for the organization for more than 1 year (4.1) | Administrative records | Annually |
| | SDA 5: Financial resources | Number and percentage of community-based organizations that have a complete and sound financial management system, which is known and understood by staff and consistently adhered to (5.1) | Administrative records | Annually |
| | SDA 6: Material resources – infrastructure and essential commodities (including medical and other products and technologies) | Number and percentage of community-based organizations reporting no stock-out of HIV, TB, Malaria or immunization essential commodities according to program implementation focus during the reporting period (6.1) | Administrative records | Quarterly/ semiannually |
| Core component 4: Community activities and service delivery | SDA 7: Community-based activities and services (delivery, use and quality) | Number and percentage of community-based organizations that deliver services for HIV, TB, malaria and immunization according to national or international accepted service delivery standards (7.1) | Institutional assessment | Annually |
| Core component 5: leadership and organizational strengthening | SDA 8: Management, accountability and leadership | Number and percentage of staff members of community-based organisations with written terms of reference and defined job duties (8.1) | Administrative records | Annually |

TABLE 6.
Top 10 recommended core process and output indicators for monitoring and evaluating CSS efforts

| Core component | Service delivery area | Indicators | Data source | Frequency |
|--|---|---|------------------------|-------------------------|
| Core component 6: Monitoring & Evaluation and Planning | SDA 9: Monitoring & evaluation, evidence-building | Number and percentage of community-based organizations that submit timely, complete and accurate financial and programmatic reports to the national level according to nationally or internationally recommended standards and guidelines (where such guidelines exist) (9.1) | Administrative records | Quarterly/ semiannually |
| | SDA 10: Strategic planning | Number and percentage of community-based organizations with a developed strategic plan covering 2 to 5 years (10.1) | Administrative records | Annually |

TABLE 7.
Additional process and output indicators for monitoring and evaluating CSS efforts

| Core component | Service delivery area | Indicators | Data source | Frequency |
|---|---|--|------------------------|--------------|
| Core component 1: Enabling environments and advocacy | SDA 1: Monitoring and documentation of community and government interventions | Number of community-based organizations and/or networks that have documented and publicized barriers to equitable access to health services and/or implementation of national HIV, TB, malaria and immunization programs during the last 12 months (1.2) | Administrative records | Annually |
| Core component 2: Community networks, linkages, partnerships and coordination | SDA 3: Building community linkages, collaboration and coordination | Number and percentage of community-based organizations that are represented through membership in national or provincial level technical or coordination policy bodies of disease programs and providing feedback to communities (3.2) | Administrative records | Annually |
| | | Number and percentage of community-based organizations that implemented at least one documented feedback mechanism with the community they serve in the last 6 months (3.3) | Administrative records | semiannually |

TABLE 7.
Additional process and output indicators for monitoring and evaluating CSS efforts

| Core component | Service delivery area | Indicators | Data source | Frequency |
|---|--|---|-------------------------|-------------------------|
| Core component 3: Resources and capacity building | SDA 4: Human resources: skills building for service delivery, advocacy and leadership | Number and percentage of community health workers currently working with community-based organizations who received training or re-training in HIV, TB, malaria or immunization service delivery according to national guidelines (where such guidelines exist) during the last national reporting period (4.2) | Administrative records | Quarterly |
| | | Number and percentage of community-based organizations that received supportive supervision in accordance with national guidelines (where such guidelines exist) in the last 3-6 months (4.3) | Administrative records | Quarterly/ semiannually |
| | | Number and percentage of volunteers working with community-based organizations that are provided with incentives (4.4) | Administrative records | Quarterly |
| | SDA 5: Financial resources | Number and percentage of community-based organizations that have core funding secured for at least 2 years (5.2) | Administrative records | Annually |
| | SDA 6: Material resources – infrastructure and (including medical and other products and technologies) | Number and percentage of community-based organizations that keep accurate data for inventory management according to national or international policy (6.2) | Institutional survey | Annually |
| | | Number and percentage of community-based organisations with staff or volunteers that are responsible for stock management trained or re-trained in stock (inventory) management in the past 12 months (6.3) | Administrative records | Quarterly |
| | | Number and percentage of community-based organizations that maintain adequate storage conditions and handling procedures for essential commodities (6.4) | Institutional survey | Annually |
| Core component 4: Community activities and service delivery | SDA 7: Community-based activities and services – delivery, use and quality | Number and percentage of community-based organizations that implemented activities contributing to the national disease strategic plan as documented by their plans and reports to the national designated entity (7.2) | Administrative records | Annually |
| | | Number and percentage of people that have access to community-based HIV, TB, malaria or immunization services in a defined area (7.3) | Population based-survey | 2-3 years |

TABLE 7.
Additional process and output indicators for monitoring and evaluating CSS efforts

| Core component | Service delivery area | Indicators | Data source | Frequency |
|---|---|---|------------------------|-------------------------|
| Core component 5: Leadership and organizational strengthening | SDA 8: Management, accountability and leadership | Number and percentage of community-based organizations with staff in managerial positions who received training or re-training in management, leadership or accountability during the last reporting period (8.2) | Administrative records | Quarterly/ semiannually |
| | | Number and percentage of community-based organizations that received technical support for institutional strengthening in accordance with their requests the last 12 months (8.3) | Administrative records | Annually |
| Core component 6: Monitoring and evaluation and planning | SDA 9: Monitoring and evaluation, evidence-building | Number and percentage of community-based organizations with at least one staff member in charge of M&E (9.2) | Administrative records | Annually |
| | | Number and percentage of community-based organizations with at least one staff member in charge of M&E who received training or re-training in M&E according to nationally recommended guidelines (where such guidelines exist) during the last national reporting period (9.3) | Administrative records | Quarterly/ semiannually |
| | | Number and percentage of community-based organizations using standard data collection tools and reporting formats to report to the national reporting system (9.4) | Administrative records | Annually |
| | | Number and percentage of community-based organizations conducting documented reviews of their own program performance according to their strategic plan in accordance to national reporting cycle (9.5) | Administrative records | Quarterly |
| | SDA 10: Strategic planning | Number and percentage of community-based organisations that are implementing a budgeted annual work plan (10.2) | Administrative records | Annually |

TABLE 8.
Health outcome indicators for monitoring and evaluating health and community systems strengthening

| Indicator | Topic | Frequency of reporting | Preferred data source |
|---|---------------|------------------------|-----------------------------------|
| Outcomes: HIV/AIDS, malaria, tuberculosis, and maternal, newborn and child health | | | |
| Percentage unsuspected malaria cases that have laboratory diagnosis | Malaria | Quarterly | Routine facility reporting system |
| Percentage of uncomplicated malaria cases receiving appropriate treatment | Malaria | Quarterly | Routine facility reporting system |
| Percentage of women who received two or more doses of IPT during their last pregnancy | Malaria, MNCH | 3-5 years | Population-based survey |
| Case notification rate ²⁹ | TB | Annually | Routine facility reporting system |
| Treatment success rate | TB | Annually | Routine facility reporting system |
| Percentage of adults/children with advanced HIV infection receiving ART | HIV, MNCH | Quarterly | Routine facility reporting system |
| Percentage of HIV-positive pregnant women who receive ART for prevention of mother-to-child transmission of HIV | HIV, MNCH | Quarterly | Routine facility reporting system |
| Percentage of women attending antenatal care ^{29,30,31,32} | MNCH | 3-5 years | Population-based survey |
| Percentage of births attended by a skilled health professional ^{29,30,31,32} | MNCH | 3-5 years | Population-based survey |

TABLE 9.
Health impact indicators for monitoring and evaluating health and community systems strengthening

| Indicator | Topic | Frequency of reporting | Preferred data source |
|---|------------------------|------------------------|--|
| Impact: Health status | | | |
| Deaths due to major cause, sex and age (Top 20 major causes of death, ICD based) ^{29,31} | HIV, TB, Malaria, MNCH | 3-5 years | Death registration, survey, census, facility reports |
| Percentage of adults and children known to be on treatment 12 months after initiation of antiretroviral therapy ^{29,30,31,32,33} | HIV, MNCH | Annually | Facility records |
| Percentage of infants born to HIV-infected mothers who are infected | HIV, MNCH | Annually | Modeling |
| Confirmed malaria cases (RDTs/microscopy) | Malaria | Quarterly | Routine facility reporting system |
| Inpatient malaria deaths | Malaria | Quarterly | Routine facility reporting system |
| Maternal mortality ratio ^{31,32} | MNCH | 3-5 years | Death registration, survey, census, facility reports |
| Child mortality (neonatal, infant, perinatal) ^{31,32} | MNCH | 3-5 years | Death registration, survey, census |
| Ratio of household out-of-pocket payments for health to total expenditure on health ^{30,34} | HSS health financing | 3-5 years | Population-based surveys |

29 WHO. Global Health Observatory Data Repository. Geneva: WHO; 2011. Available at: <http://apps.who.int/ghodata/>

30 WHO/UNICEF. Countdown to 2015 decade report (2000–2010): taking stock of maternal, newborn and child survival. Geneva: WHO; 2010.

31 *Indicators for monitoring the Millennium Development Goals: definitions, rationale, concepts, and sources*. UNDP: New York. 2003.32 *Keeping promises, measuring results*. United Nations Commission on Accountability for Women's and Children's Health, World Health Assembly, Sixty-fourth session: Geneva. 2011. Available at: http://www.who.int/pmnch/media/membernews/2011/20110519_pr_health_account_report/en.33 *Monitoring the Declaration of Commitment on HIV/AIDS: Guidelines on the Construction of Core Indicators*. UNAIDS: Geneva. 2009.

34 WHO. Monitoring the building blocks of health systems: A handbook of indicators and their measurement strategies. Geneva: WHO; 2010.

3.3 Data sources for CSS indicators

Administrative records: These are the source documents used for routine managing of the organization in the course of program implementation and service delivery. The records will differ by indicator and organization and therefore need to be defined at the planning stage, when the indicator is being incorporated into the program. An indicator may actually require information from multiple administrative records. Indicator-specific guidance has been included in the indicator definition. Examples include: activity reports, policy documents, monitoring reports, supervision checklists, client registers and training records.

Institutional Surveys/Assessments: These are periodic data collection exercises from the community-based organizations to gather information on defined aspects of the organization usually related to performance and or quality standards. These are commonly implemented by the national level designated entity with oversight responsibility for community-based activities and services. These can either be conducted as part of routine supervision or as an exclusive exercise. Examples include pre-defined standards checklist and interview questionnaires.

Population-based survey: A survey based on sampling of the target or general population, generally aiming to represent the characteristics, behavior and practices of that population. Surveys require sufficient sample size to represent the larger population and to analyze subgroups by age, sex, region and other characteristics. These are commonly implemented by the national-level designated program authority with the involvement of all partners. CSS implementers are encouraged to participate as much as possible in the planning and execution of the surveys. Examples of population-based surveys include: Multiple Cluster Surveys (MICS), Demographic and Health Surveys (DHS and DHS+), AIDS Indicator Surveys (AIS).

3.4 Evaluation of CSS Efforts

A CSS Technical Working Group meeting for the review of the CSS indicators was hosted by the Global Fund in June 2011. The working group determined that there is still a major gap in the definitions of approaches to evaluating CSS interventions. Members present included representatives from regional implementing partners, UNAIDS, WHO HIV/AIDS and STOP-TB departments, the World Bank, UNICEF, the International HIV/AIDS Alliance, USAID, U.S. Office of the Global AIDS Coordinator, and MEASURE Evaluation. The group determined that comprehensive guidance for countries will be developed through 2012. Ongoing efforts to learn from evaluation exercises in select countries are in place.

Countries with CSS programs are therefore encouraged to include the recommended outcome and impact

indicators in their M&E plans as the initial step for assessing and evaluating the contribution of CSS interventions to health results. These will be assessed at the periodic review for CSS grants under the new Global Fund grant architecture. In addition, CSS programs need to plan and conduct program evaluations at intervals during the lifetime of the program; at the formative stage, midterm through program implementation, and at termination. These evaluations are embedded into the systematic approach for developing CSS interventions outlined in the CSS framework. Please refer to chapter five of the CSS framework.³⁵

To prepare for the periodic program reviews, the review questions that will be assessed and analyzed to inform reprogramming and resource allocation should be identified as early as possible, ideally at the program development stage.

Annex 1: HSS Resources

Monitoring the Building Blocks of Health Systems: A handbook of indicators and their measurement strategies. Geneva: WHO; 2010. Available from: <http://www.who.int/healthinfo/systems/monitoring/en/index.html>.

Measuring medicine prices, availability, affordability and price components. 2nd ed. Geneva and Amsterdam, WHO and Health Action International, 2008. Available from: http://www.who.int/medicines/areas/access/medicines_prices08/en/index.html or <http://www.haiweb.org/medicineprices>.

Measuring transparency in medicines registration, selection and procurement: four country assessment studies. Geneva: WHO; 2006. Available from: <http://www.who.int/medicinedocs/index/assoc/s14096e/s14096e.pdf>.

Logistics Indicators Assessment Tool (LIAT). Arlington, VA: DELIVER PROJECT, John Snow Inc; 2006. Available from: <http://deliver.jsi.com/dhome/topics/monitoring/monitoringpubs/meresources/metools>. This is a quantitative data collection instrument, developed by DELIVER, that assesses health commodity logistics system performance and commodity availability at health facilities. The user's guide is included and provides detailed instructions on how to use the tool.

Assessment Tool for Laboratory Services (ATLAS). Arlington, VA: DELIVER PROJECT, John Snow Inc.; 2006. Available from: <http://deliver.jsi.com/dhome/topics/monitoring/monitoringpubs/meresources/metools>. This document is a data-gathering tool developed by the DELIVER PROJECT to assess laboratory services and logistics. The ATLAS is a diagnostic and monitoring tool that can be used as a baseline survey to complete an annual assessment or as an integral part of the work

³⁵ Please refer to chapter 5 of the CSS Framework, available at: www.theglobalfund.org/documents/civil_society/CivilSociety_CommunitySystemsStrengthening_Framework_en

planning process. The ATLAS is primarily a quantitative tool with a small-sample qualitative facility survey of available commodities and equipment. The information collected using the ATLAS is analyzed to identify issues and opportunities and to outline further assessment and/or appropriate interventions.

Logistics System Assessment Tool (LSAT). Arlington, VA: DELIVER PROJECT, John Snow Inc.; 2006. Available from: <http://deliver.jsi.com/dhome/topics/monitoring/monitoringpubs/meresources/metools>. Newly revised, this qualitative data collection instrument provides a comprehensive system-level assessment of logistics system performance for any program that manages a health commodity.

Guide to writing a procurement and supply management plan. Geneva: Global Fund to Fight AIDS, Tuberculosis and Malaria; 2006. Available from: <http://www.theglobalfund.org/en/procurement/guide/>

Using indicators to measure country pharmaceutical situations: fact book on WHO Level I and Level II monitoring indicators. Geneva: WHO; 2006. Available from: <http://www.who.int/medicinedocs/collect/medicinedocs/index/assoc/s14101e/s14101e.pdf>.

Managing drug supply: the selection, procurement, distribution and use of pharmaceuticals. 2nd ed. WHO and MSH. Hartford, CT: Kumarian Press; 1997.

The world health report 2006 – Working together for health. Geneva: WHO; 2006. Available from: <http://www.who.int/whr/2006/en/index.html>.

Working together for health: the world health report 2006 – Policy briefs. Geneva: WHO; 2006. Available from: http://www.who.int/hrh/documents/policy_brief/en/index.html.

Assessing financing, education, management and policy context for strategic planning of human resources for health. Bossert T et al. Geneva: WHO; 2007. Available from: http://www.who.int/hrh/tools/assessing_financing.pdf.

Tools for planning and developing human resources for HIV/AIDS and other health services. Management Sciences for Health. Geneva: WHO; 2006. Available from: <http://www.who.int/hrh/tools/planning>.

Profiles of health facility assessment methods. International Health Facility Assessment Network. Calverton, MD: MEASURE Evaluation; 2006. Available from: <http://www.cpc.unc.edu/measure/publications/pdf/tr-06-36.pdf>.

Health systems assessment approach: a how-to manual. Islam M, ed. Bethesda, MD: Health Systems 20/20; Available from: <http://www.healthsystems2020.org/content/resource/detail/528>.

Annex 2: CSS Resources

Sources of support and technical assistance

African Council of AIDS Service Organisations (AfriCASO) <http://www.africaso.net/>

AIDS & Rights Alliance for Southern Africa – capacity building http://www.arasa-online-training.org/index.php?option=com_content&view=article&id=46&Itemid=67/

Asia Pacific Council of AIDS Service Organisations (APCASO) <http://www.apcaso.org/>

Asian Harm Reduction Network - Technical Assistance and Capacity Building Unit <http://www.ahrn.net/index.php?option=content&task=view&id=2117&Itemid=2>

Aidsplan guides to the Global Fund <http://www.aidsplan.org/index.php?page=guides>

Caribbean HIV/AIDS Regional Training Network (CHART) <http://www.chartcaribbean.org/>

Civil Society Action Team (CSAT) <http://www.icaso.org/csat.html>

Eurasian Harm Reduction Network (EHRN) – trainings and technical assistance <http://www.harm-reduction.org/hub.html>

Funding for civil society responses to HIV/AIDS in Tanzania: Status, problems, possibilities; CADRE May 2008 <http://www.cadre.org.za/node/192>

Global Network of People Living with HIV (GNP+) <http://www.gnpplus.net/>

Latin American and the Caribbean Council of AIDS Service Organisation (LACCASO) <http://www.laccaso.org/>

MEASURE Evaluation Capacity Building Guides <http://www.cpc.unc.edu/measure/tools/monitoring-evaluation-systems/capacity-building-guides/capacity-building-guides-index.html>

Roll Back Malaria Toolbox <http://www.rollbackmalaria.org/toolbox/index.html>

Stop-TB - TB Technical Assistance Mechanism (TEAM) <http://www.stoptb.org/countries/tbteam/default.asp>

UNAIDS Technical Support Facilities <http://www.unaids.org/en/CountryResponses/TechnicalSupport/TSF/>

Other information sources, including those referenced in the CSS framework

A model quality assurance system for procurement agencies. Module IV. Receipt and storage of purchased products: WHO Expert Committee on Specifications for Pharmaceutical Preparations: 40th report. Geneva: WHO; 2006. http://whqlibdoc.who.int/trs/WHO_TRS_937_eng.pdf

A model quality assurance system for procurement agencies: recommendations for quality assurance systems focusing on prequalification of products and manufacturers, purchasing, storage and distribution of pharmaceutical products. WHO/UNICEF/UNDP/UNFPA/World Bank; 2007. <http://www.who.int/medicines/publications/ModelQualityAssurance.pdf>

Abuja Declaration and Plan of Action http://www.rollbackmalaria.org/docs/abuja_declaration_final.htm

Advocacy, communication & social mobilisation (ACSM) for tuberculosis control – a handbook for country programmes. Stop TB Partnership; 2007. http://whqlibdoc.who.int/publications/2007/9789241596183_eng.pdf

Amsterdam Declaration to Stop TB http://www.stoptb.org/assets/documents/events/meetings/amsterdam_conference/decla.pdf

Community-directed interventions for major health problems in Africa. A multicountry study. WHO; 2008 <http://apps.who.int/tdr/svc/publications/tdr-research-publications/community-directed-interventions-health-problems>

Civil Society Support and Treatment Access. Fakoya A, Abdefadil L, Public service review: International development #14, June 2009. http://www.publicservice.co.uk/article.asp?publication=InternationalDevelopment&id=391&content_name=Treatmentaccess&article=12197

Community involvement in rolling back malaria. Roll Back Malaria / WHO; 2002 http://www.rollbackmalaria.org/cmc_upload/0/000/016/247/community_involvement.pdf

Community involvement in tuberculosis care and prevention: Guiding principles and recommendations based on a WHO review. WHO; 2008 http://whqlibdoc.who.int/publications/2008/9789241596404_eng.pdf

Community Organizing and Community Building for Health. Meredith Minkler. Piscataway, NJ: Rutgers University Press; 2004. http://rutgerspress.rutgers.edu/acatalog/Community_Organizing_and_Community_Building_for_664.html

Declaration of Alma Ata – International conference on primary health care 1978. http://www.who.int/hpr/NPH/docs/declaration_almaata.pdf

Declaration of Commitment on HIV/AIDS. <http://www.unaids.org/en/AboutUNAIDS/Goals/UNGASS/default.asp>

Exploring the concept of community: implications for NGO management. Jo de Berry. London: London School of Economics; 2002. <http://www.lse.ac.uk/collections/CCS/pdf/IWP/IWP8de-berry.PDF>

Funding for civil society responses to HIV/AIDS in Tanzania: Status, problems, possibilities. Johannesburg: CADRE; May 2008. <http://www.cadre.org.za/node/192>

Gender, Health and Malaria; Geneva: WHO/RBM; June 2007. <http://www.rollbackmalaria.org/globaladvocacy/docs/WHOinfosheet.pdf>

Global HIV M&E information website: <http://www.globalhivmeinfo.org/DigitalLibrary/Pages/12%20Components%20HIV%20Evaluation%20Research%20and%20Learning%20Resources.aspx>

Guidelines for the storage of essential medicines and other health commodities. JSI DELIVER; 2003 http://deliver.jsi.com/dlvr_content/resources/allpubs/guidelines/GuidStorEsse_Pock.pdf

Handbook of supply management at first level health care facilities. WHO; 2007. <http://www.who.int/hiv/amds/HandbookFeb2007.pdf>

HIV Monitoring & Evaluation Resource Library. World Bank GAMET website [http://gametlibrary.worldbank.org/pages/12_1\)HIVM_ESystems-12components_English.asp](http://gametlibrary.worldbank.org/pages/12_1)HIVM_ESystems-12components_English.asp)

Home is where the care is. The role of communities in delivering HIV treatment care and support. Abdefadil L, Fakoya A, Public Service Review: International Development #15, September 2009. http://www.publicservice.co.uk/pub_contents.asp?id=401&publication=InternationalDevelopment&content=3850&content_name=Health

Increasing Civil Society Impact on the Global Fund to Fight AIDS, Tuberculosis and Malaria: Strategic Options and Deliberations. Brook K Baker, ICASO; 2007. http://www.icaso.org/resources/CS_Report_Policy_Paper_Jan07.pdf

Indicator Standards: Operational Guidelines for Selecting Indicators for the HIV Response indicator. UNAIDS MERG; January 2010. http://www.globalhivmeinfo.org/AgencySites/MERG%20Resources/MERG%20Indicator%20Standards_Operational%20Guidelines.pdf

Managing TB medicines at the primary level. MSH RPM Plus; 2008. http://erc.msh.org/toolkit/toolkitfiles/file/TB-Primary-Level-Guide-April-2008_final-English.pdf

Millennium Development Goals. <http://www.undp.org/mdg/basics.shtml>

Models for Funding and Coordinating Community-Level Responses to HIV/AIDS. Johannesburg: CADRE; 2007. <http://www.cadre.org.za/node/198>

Models for Funding and Coordinating Community-Level Responses to HIV/AIDS. Johannesburg: CADRE; 2007. <http://www.cadre.org.za/node/198>

Operations Manual for Delivery of HIV Prevention, Care and Treatment at Primary Health Centres in High-Prevalence, Resource-Constrained Settings. WHO IMAI; Dec 2008. http://www.who.int/hiv/pub/imai/operations_manual/en/

Ottawa Charter for Health Promotion; First International Conference on Health Promotion. WHO; 1986. http://www.who.int/hpr/NPH/docs/ottawa_charter_hp.pdf

Partnership work: the health-service community interface for the prevention, care and treatment of HIV/AIDS; WHO; 2002. http://www.who.int/hiv/pub/prev_care/en/37564_OMS_interieur.pdf

Procurement & Supply Management Toolbox; <http://www.psmtoolbox.org/en/>

Rates of virological failure in patients treated in a home-based versus a facility-based HIV-care model in Jinja, southeast Uganda: a cluster-randomised equivalence trial. Jaffar S, Amuron B, et al. Lancet 2009. [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(09\)61674-3/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(09)61674-3/abstract)

Supporting community-based responses to AIDS: A guidance tool for including Community Systems Strengthening in Global Fund proposals. UNAIDS; January 2009. http://data.unaids.org/pub/Manual/2009/20090218_jc1667_css_guidance_tool_en.pdf

Strengthening Community Health Systems: Perceptions and responses to changing community needs. Johannesburg: CADRE; 2007. <http://www.cadre.org.za/node/197>

Technical Guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users. WHO/UNODC/UNAIDS; 2009. <http://www.who.int/hiv/pub/idu/targetsetting/en/>

The Global Fund Information Notes Fact Sheets:

Fact Sheet: Community Systems Strengthening; The Global Fund, August 2011. http://theglobalfund.org/documents/rounds/11/R11_CSS_InfoNote_en/

Fact Sheet: Health systems strengthening; The Global Fund, August 2011. http://theglobalfund.org/documents/rounds/11/R11_HSS_InfoNote_en/

Fact Sheet: Addressing women, girls and gender equality. The Global Fund, August 2011. http://theglobalfund.org/documents/rounds/11/R11_Gender_InfoNote_en/

Fact Sheet: Addressing sex work, MSM and transgender people in the context of the HIV epidemic. The Global Fund, August 2011. http://theglobalfund.org/documents/rounds/11/R11_SOGI_InfoNote_en/

The Global Fund Monitoring, Evaluation and Operations Research resources:

Framework for operations research. The Global Fund 2009. <http://www.theglobalfund.org/en/me/documents/operationalresearch/>

Monitoring and evaluation plan guideline. The Global Fund 2010. <http://www.theglobalfund.org/en/me/documents/planguidelines/>

Monitoring and evaluation self-assessment. The Global Fund 2007. <http://www.theglobalfund.org/en/me/documents/systemassessments/>

The 'Most Significant Change' (MSC) Technique – a guide to its use. R Davies & J Dart 2005. <http://www.mande.co.uk/docs/MSCGuide.pdf>

The World Health Report 2008 - Primary Health Care Now More Than Ever <http://www.who.int/whr/2008/en/index.html>

UNGASS Guidelines for 2010 reporting; UNAIDS 2009 http://www.unaids.org/en/KnowledgeCentre/Resources/FeatureStories/archive/2009/20090331_UNGASS2010.asp

WHO operational package for assessing, monitoring and evaluating country pharmaceutical situations. Guide for coordinators and data collectors; WHO 2007 <http://www.who.int/medicinedocs/index/assoc/s14877e/s14877e.pdf>

WHO - The Determinants of Health <http://www.who.int/hia/evidence/doh/en/index.html>

WHO HIV website: <http://www.who.int/hiv/topics/en/index.html>

WHO Malaria website: <http://www.who.int/topics/malaria/en/>

WHO TB website: <http://www.who.int/tb/topics/en/>

Annex 3: Description of Health and Community Systems Strengthening indicators

With the exception of indicators described in this annex, health and community systems strengthening indicators are defined in the following documents:

HSS: Monitoring the building blocks of health systems: A handbook of indicators and their measurement strategies. Geneva: WHO; 2010. Available at: http://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf

CSS: Community Systems Strengthening Framework. The Global Fund: Geneva. August 2011. Available at: www.theglobalfund.org/documents/civil_society/CivilSociety_CommunitySystemsStrengthening_Framework_en.

HSS indicator

Impact - Maternal and Child Health

Maternal mortality ratio

Rationale

The maternal mortality ratio is the most widely used measure of maternal death. It measures obstetric risk—in other words, the risk of a woman dying once she is pregnant. It does not therefore take into account the risk of being pregnant (i.e. fertility) in a population, which is measured by the maternal mortality rate or the lifetime risk.

Maternal mortality is widely acknowledged as a general indicator of the overall health of a population, of the status of women in society and of the functioning of the health system. It is therefore useful for advocacy purposes, in terms both of drawing attention to broader challenges faced by governments and of safe motherhood. This indicator can show the magnitude of the problem of maternal death in a country as a stimulus for action. Where estimates can be reliably produced at a subnational level, these may help to set priorities. For example, a ratio of 50–250 per 100 000 may point to problems of quality of care for labour/delivery, while higher ratios (>250) may suggest problems of access as well (1).

Maternal deaths are difficult to measure owing to many factors, including their comparative rarity and context-specific factors such as reluctance to report abortion-related deaths, problems of memory recall and lack of medical attribution. There is thus no single source or data collection method adequate for investigating all aspects of maternal mortality in all settings.

Numerator: All maternal deaths occurring in a period (usually a year)

Denominator: Total number of live births occurring in the same period

Measurement

RAMOS (reproductive-age mortality surveys) seek to identify and classify all female deaths in the reproductive period, using both traditional and untraditional sources of information to find deaths, such as cross-sectional household surveys, continuous population surveillance, hospital and health-centre records and key informants. Direct estimation relies on asking questions about maternal deaths in a household during a recent interval of time, say 1–2 years. These questions can be asked in the context of a household survey or a census of all households. Although both RAMOS and direct estimation can provide up-to-date estimates of the maternal mortality ratio, they require large sample sizes and are usually both time-consuming and costly to conduct. The sisterhood method may overcome large sample size requirements by interviewing adult respondents about the survival of all their sisters, thereby yielding information on many woman-years at risk for each household visit. There are two variants of this method—the original indirect method (2) and the variant direct method (3). While the former involves posing fewer questions to respondents and is thus easier to apply in the field, a major disadvantage is that the pooled estimate derived from using data from all respondents relates statistically to a point around 10–12 years prior to the survey. The method also relies on a number of assumptions that restrict its use in settings with very low fertility and/or major migration flows to or from the population. The direct approach, on the other hand, provides a more current estimate at about 3–4 years prior to the survey, but this comes at the cost of larger sample sizes and more complex questions and is thus more costly and time-consuming to gather and analyse. Without sufficiently large sample sizes to avoid overlapping confidence intervals, the direct sisterhood method cannot be used to monitor time trends. Both the indirect and direct methods provide estimates rather than precise figures for the maternal mortality ratio.

Confidential enquiries into maternal deaths identify the numbers, causes and avoidable factors associated with maternal deaths. Through the lessons learnt from each woman's death, and through aggregating the data, they provide evidence of where the main problems in overcoming maternal mortality lie and an analysis of what can be done in practical terms, and highlight the key areas requiring recommendations for health sector and community action as well as guidelines for improving clinical outcome. Confidential enquiries work better in countries where there is a functioning statistical infrastructure of vital records, and disadvantages include that they provide only the numerator (maternal deaths), that they require more resources than other methodologies, and that they do not include interviews with relatives or others in the community, with the result that they focus on clinical or health factors (4).

Data source: vital registration, health facility-based data, population-based surveys or surveillance.

Frequency: Annually, 3–5 years

Where routine information systems allow maternal mortality to be tracked nationally and with minimal extra cost, and where the number of deaths is sufficiently large to produce stable estimates, then it is realistic to consider annual figures. However, where population surveys are needed because routine systems are weak or nonexistent, then sample sizes and thus field costs are likely to be too great to justify producing precise estimates more frequently than every 5–10 years.

Resources

1. Campbell O et al. Lessons learnt: a decade of measuring the effects of safe motherhood programmes. London, London School of Hygiene & Tropical Medicine, 1997.
2. Graham W, Brass W, Snow RW. Indirect estimation of maternal mortality: the sisterhood method. *Studies in Family Planning*, 1989, 20:125–135.
3. Stanton C, Abderrahim N, Hill K. An assessment of DHS maternal mortality indicators. *Studies in Family Planning*, 2000, 31:111–123.
4. Beyond the numbers. Reviewing maternal deaths and complications to make pregnancy safer. Geneva, World Health Organization, 2004.

Indicator definition provided in: Reproductive health indicators : guidelines for their generation, interpretation and analysis for global monitoring. WHO: Geneva; 2006. Available at: http://whqlibdoc.who.int/publications/2006/924156315X_eng.pdf.

HSS indicator

Impact – Maternal, neonatal and child health

Child mortality (neonatal, infant, perinatal)

Rationale

Child mortality can be disaggregated by age group (under 5, neonatal, infant, perinatal). Under-5 mortality rate is a leading indicator of the level of child health and overall development in countries. It is also a MDG indicator. Measures the probability of a child born in a specific year or period dying before reaching the age of five, if subject to age-specific mortality rates of that period.

Definition

Perinatal mortality rate: Probability of dying between 22 completed week (154 days) of gestation and seven completed days after birth expressed per 1000 live births.

Neonatal mortality rate - Probability of dying between birth and 28 complete days after birth expressed per 1,000 live births.

Infant mortality rate - Probability of dying between birth and exactly one year of age [ie. 11 months of life] expressed per 1,000 live births.

Under-five mortality rate - Probability of dying between birth and exactly five years of age [ie. 59 months of life] expressed per 1,000 live births.

Measurement

Age-specific mortality rates among children and infants are calculated from birth and death data derived from vital registration, census, and/or household surveys:

Vital registration: Number of deaths by age and numbers of births and children in each age group are used to calculate age specific rates. This system provides annual data.

Census and surveys: An indirect method is used based on questions to each woman of reproductive age as to how many children she has ever born and how many are still alive. The Brass method and model life tables are then used to obtain an estimate of under-5 mortality.

Surveys: A direct method is used based on birth history - a series of detailed questions on each child a woman has given birth to during her lifetime. To reduce sampling errors, the estimates are generally presented as period rates, for five or 10 years preceding the survey.

Empirical data from different sources are consolidated to obtain estimates of the level and trend in under-5 mortality by fitting a curve to the observed mortality points. However, to obtain the best possible estimates, judgement needs to be made on data quality and how representative it is of the population. Recent statistics based on data availability in most countries are point estimates dated by at least 3-4 years which need to be projected forward in order to obtain estimates of under-5 mortality for the current year.

Even though many countries have collected information on child mortality in recent years, the high demand for very recent child mortality trend information is difficult to meet through household surveys. High quality of vital registration systems (completeness of registration) and high quality of survey or census data collection are crucial - WHO does estimate the level of underestimation of vital registration systems and there clearly is substantial variation in data quality and consistency across countries.

Empirical data from civil registration and household surveys are compiled and adjusted in order to maintain consistency with the estimates of probability of dying at less than age 5 years. When no survey or registration data point is available, the age-specific mortality rate is estimated from the probability of dying at less than age 5 years, using a regression corrected for AIDS.

Data source: vital registration, surveys, census

Frequency: 3-10 years

Resources

1. Health Status Statistics: Mortality. Under 5 mortality rate. WHO, available at: <http://www.who.int/healthinfo/statistics/indunder5mortality/en/>
2. Health Status Statistics: Mortality. Neonatal mortality rate. WHO, available at: <http://www.who.int/whosis/indicators/2007MortNeoBoth/en/index.html>
3. Basic indicators. UNICEF. Available at: http://www.unicef.org/infobycountry/stats_popup1.html

HSS indicator

Outcome – Maternal, neonatal and child health

Percentage of women attending antenatal care

Rationale

The main purpose of an indicator of antenatal care 1-visit coverage is to provide information on proportion of women who use antenatal care services. The finding that women who attend ANC are also more likely to use skilled health personnel for care during birth (1) and that ANC may facilitate better use of emergency obstetric services (2) is also further support for the use of this indicator in combination with the indicator “skilled attendant at delivery”.

ANC visits have been proposed as a proxy measure to assess progress towards reducing maternal mortality. Although epidemiological studies tend to show an association between improved maternal health outcome and ANC, most fail to control for selection biases that would positively influence the outcome (3) and this potential link remains uncertain.

Women’s use of ANC is more strongly associated with improved perinatal survival (4), and measuring ANC coverage therefore has a greater role in the monitoring and evaluation of programmes that address newborn health and survival (5).

Numerator: Number of pregnant women attended, at least once during their pregnancy, by skilled personnel for reasons related to pregnancy during a fixed period

Denominator: Total number of live births during the same period

Measurement

Skilled health attendant (sometimes referred to as skilled attendant) is defined as an accredited health professional—such as a midwife, doctor or nurse—who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns. This definition excludes traditional birth attendants whether trained or not, from the category of skilled health workers. Live birth is the birth of a fetus after 22 weeks’ gestation or weighing 500 g or more that shows signs of life—breathing, cord pulsation or with audible heart beat. This cut-off point refers to when the perinatal period commences and aims at confining the definition for pragmatic purposes.

The denominator comprises the number of live births. Although in theory all births should be included, in practice only live births are used owing to difficulty in obtaining information about non-live births. The exclusion of non-live births such as stillbirths, spontaneous and induced abortions and ectopic and molar pregnancies underestimates the need for ANC in the population. In practice, however, this potential for underestimation is reduced because in most surveys only women giving birth to live offspring are included in the numerator.

In the absence of survey data, the denominator may be estimated from the vital registration system where birth registration is thought to be virtually complete. Since only 52% of countries report virtually complete birth registration (7), however, other countries must derive an estimate of the denominator from census data (crude birth rate multiplied by total population). Health facility data should not be used to estimate denominators unless utilization is very high (6).

A further disadvantage is that health services may not collect data in an appropriate format for constructing the indicator. Frequently, the data are episode rather than woman-based (i.e. the number of consultations performed by the provider is recorded but not the number of times a specific woman is seen). Since women attend for care several times, and may also present at different facilities, this creates the potential for double counting and therefore overestimating ANC coverage (5). Health service data may also be poor quality and records may be incomplete or missing.

Data source: For most countries, the main sources of information on antenatal care (ANC) are routine health service data and household survey data.

Frequency: This indicator is responsive to change in the short term. Some sources recommend constructing the indicator on a yearly basis, but annual monitoring is feasible only when the data are derived from routine data sources. For international comparisons, periods of 3–5 years are recommended (7). More frequent surveys are probably not desirable because sampling error makes it difficult to assess whether small changes are real or are due to chance variation.

Resources

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Indicator definition provided in: *Reproductive health indicators: guidelines for their generation, interpretation and analysis for global monitoring*. WHO: Geneva; 2006. Available at: http://whqlibdoc.who.int/publications/2006/924156315X_eng.pdf.

HSS indicator

Outcome – Maternal, neonatal and child health

Percentage of births attended by a skilled health professional

Rationale

The indicator helps programme management at district, national and international levels by indicating whether safe motherhood programmes are on target in the availability and utilization of professional assistance at delivery. In addition, the proportion of births attended by skilled personnel is a measure of the health system's functioning and potential to provide adequate coverage for deliveries. On the other hand, this indicator does not take account of the type and quality of care.

"Skilled attendant at birth" has been proposed as an intermediary, process or proxy indicator for monitoring progress towards the reduction of maternal mortality. This indicator is highly correlated with maternal mortality levels, although such a correlation does not provide levels of causality (1).

Numerator: Births attended by skilled health personnel during a specified period

Denominator: Total number of live births during the specified period

Measurement

Skilled health attendant (sometimes referred to as skilled attendant) is defined as an accredited health professional—such as a midwife, doctor or nurse—who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns (2). This definition excludes traditional birth attendants whether trained or not, from the category of skilled health workers. Live birth is the birth of a fetus after 22 weeks' gestation or weighing 500 g or more that shows signs of life—breathing, cord pulsation or with audible heart beat (3). This cut-off point refers to when the perinatal period commences and aims at confining the definition for pragmatic purposes.

Health facility-based data As a point of contact with women, health services are the main and most obvious routine source of information for the numerator. Nevertheless, routine health service information used on its own constitutes a poor source of statistics on coverage of care as it often excludes private sector information. In addition, when the utilization of health services is low, using health facility information for the denominator will create major selection biases because many pregnancies or births take place outside the health system. This would cause an overestimation of the proportion of women receiving care.

Population-based survey data Population-based (household) surveys are becoming an increasingly important source of information on maternity care (4). While data from health services can be gathered annually, however, household surveys are only available on an ad hoc basis. When using survey data, absolute numbers and confidence intervals should be reported to indicate the reliability of the data and facilitate interpretation of trends and differentials. In the absence of survey data, the denominator may be estimated from the vital registration system where birth registration is thought to be virtually complete. Since only 52% of countries report virtually complete birth registration (5), however, other countries must derive an estimate of the denominator from census data (crude birth rate multiplied by total population).

Data source: For most countries, the main sources of information on skilled health personnel at delivery are routine health service data and household survey data.

Frequency: This indicator is responsive to change in the short term. Some sources recommend constructing the indicator on a yearly basis, but annual monitoring is feasible only when the data are derived from routine data sources. For international comparisons, periods of 3–5 years are recommended (6). More frequent surveys are probably not desirable because sampling error makes it difficult to assess whether small changes are real or are due to chance variation.

Resources

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