MONITORING AND EVALUATION: AN OVERVIEW

NODDY J I NABHAI
Planning, Monitoring and Evaluation for Results-Based Strategies

Based on GHAP Managing for Results Approach

Module Outcomes

**AIM**: Utilize M&E data to improve decision making and implementation performance

**SKILLS**: By the end of the course, participants should be able to

- Integrate the M&E System in the Strategic Action Plans
- Understand the rationale for effective M&E based on the UNAIDS Tool Kit and the Results Based M&E System
- Explain the elements of a comprehensive UNAIDS M&E system,
- Understand elements of an M&E logical framework, with key indicators, targets and data sources
- Contribute to an M&E operational plan and budget,
- Contribute to a tailored, functional M&E system
- Stress the epidemiological and economic foundations of M&E
- Identify and disseminate proven, evidence-based HIV/AIDS practices
Monitoring and evaluation (M&E) helps programme implementers to:

• determine the extent to which the programme/project is on track and to make any needed corrections accordingly;

• make informed decisions regarding operations management and service delivery;

• ensure the most effective and efficient use of resources;

• evaluate the extent to which the programme/project is having or has had the desired impact.
Difference between monitoring and evaluation

Monitoring means tracking the key elements of programme performance on a regular basis (inputs, activities, results).

In contrast, evaluation is the episodic assessment of the change in targeted results that can be attributed to the programme/project intervention, or the analysis of inputs and activities to determine their contribution to results.
STRATEGY RESULTS CYCLE

Formulate/Revise HIV/AIDS Strategy

Analyze HIV/AIDS and National Response Data

Identify Key National Outcomes & Priorities

Select Principal Program Strategies

Select Interventions

Resource Needs, Funding

Annual Action Plan, costing, funding

Implementation & process monitoring (indicators, resource tracking)

Evaluate Changes in Outcomes

Analyze HIV/AIDS and National Response Data

Identify Key National Outcomes & Priorities

Select Principal Program Strategies

Select Interventions

Resource Needs, Funding

Annual Action Plan, costing, funding

Implementation & process monitoring (indicators, resource tracking)

Evaluate Changes in Outcomes
Planning Process based on the Strategy Results Cycle

a. Plan the process
- Purpose
- Methodology/process
- Key persons & stakeholders
- Links with other strategies
- Roadmap/timetable

b. Analysis & Preparation
- HIV/AIDS situation
- Current response
- Capacity – available & needed

c. Develop Strategy & Workplan
- Expected results
- Strategic programs
- Workplan
- Responsibilities
- Resources

d. Plan for M&E, and Research
- Data sources
- Data collection
- Analyze & use

e. Use Strategy
- Finalize
- Disseminate
- Use plans
- Monitor results
- Evaluate impacts

Source: Adapted from P. Lumumba Osewe, WBI, World Bank. Presentation in St. Lucia, 2006
Global HIV/AIDS M&E Framework & Illustrative Data

Assessment & Planning → Inputs (Resources) → Activities (Interventions, Services) → Outputs (Immediate Effects) → Outcomes (Intermediate Effects) → Impact (Long-term Effects)

Situation Analysis
Response Analysis
Stakeholder Needs
Resource Analysis
Collaboration plans

Staff
Funds
Materials
Facilities
Supplies

Trainings
Services
Education
Treatment
Interventions

# Staff Trained
# Condoms Distributed
# Clients Served
# Tests Conducted

Provider Behavior
Risk Behavior
Service Use
Clinical Outcomes
Quality of Life

Social Norms
HIV prevalence
STI Incidence
AIDS Morbidity
AIDS Mortality
Econ. Impact

Program Development Data
Program-based Data
Population-based Biological, Behavioral & Social Data

In addition to monitoring programs, conduct process and outcome evaluations

The Logical Approach of the Results Chain

- Effects or behavior changes resulting from a strategic program
- Products and services that need to be delivered to achieve the expected outcomes
- What actually was done with the available resources to produce the intended outputs
- Critical resources (expertise, equipment, supplies) needed to implement the planned activities

“Big picture” (country longer term strategy)

Long-term, widespread improvement in society

Goal
(Long-term Impacts)

Programming

Results Planning

Apply the Results Chain to HIV/AIDS Strategy Planning

For a Results-based Strategy ask:

1. What is the aim of longer term improvement in HIV/AIDS? (national goal) = **impact and outcomes**
2. What improvements are aimed at by the end of the strategy period? = **intermediate outcomes**
3. How will one know success - which outcome targets need to be met? = **intermediate outcomes and final outputs**
4. What strategic programs and critical interventions should be the focus of the national response? = **outputs**
5. What financial, human, material, and technical resources are needed? = **inputs**

*Note: Refer to definitions in previous slide*
Applying the Logic of the Results Chain to HIV/AIDS

Reduced HIV Incidence and Prevalence. HIV prevalence is the bedrock of surveillance, monitoring, and evaluation (longer-term goal)

Increased Coverage. Access and use of services and behavior changes (strategy objectives and results)

Products and Services. First level results needed to achieve the outcomes (program outputs)

Critical resources. Includes money, people, equipment, supplies and know how (program inputs)
Measuring the Performance of the National HIV/AIDS Strategy

Once the results and outcomes of the strategy are identified, how should performance be measured?

- Performance of the HIV/AIDS strategy is measured through outcome indicators.

- For each indicator identify:
  - a baseline (what is the value now), and
  - performance targets (what value should one aim to achieve) over the time period of the strategy.
Information Triangle

- **Daily Patient Records**
- **Weekly Tally**
- **Monthly Report**
- **Annual Report**

- **Detailed Data**
- **Aggregated Data**
- **Overview, Trends, Comparisons**

- **Clinic**
- **Institution**
- **District**
- **National**
- **International**
Surveillance & Research

Surveillance comprises:
- biological,
- behavioural and
- social impact surveillance.

WHO/UNAIDS/CDC support ensures sound antenatal biological surveillance in countries with generalized HIV/AIDS epidemics.

In concentrated HIV epidemics, efforts to strengthen serosurveillance among high-risk groups are in progress.

Surveillance should be complemented by essential research, including epidemiological, evaluation and social impact research.
First Generation HIV Surveillance is Necessary to Assess the Evolution of the Epidemic

Public Health surveillance helps:
- define the nature and extent of HIV infection, and
- assess the impact that programs and services have on the HIV problem.

Types of Surveillance:
- HIV patient case reports from clinical settings
- Sentinel sero-surveillance which uses blood samples

Surveillance is the bedrock of public health monitoring

First Generation HIV Surveillance is Necessary but not Sufficient to Assess the Evolution of the Epidemic

- It records infections that have already taken place, but does not give early warning of the potential for infection.

- **Second Generation HIV Surveillance** expands the scope to include:
  - At risk behaviors (unprotected sex)
  - Biological markers (STDs)
  - Knowledge (or lack of) of how HIV is transmitted
  - Behavioral and other studies (DHS)

Evaluate Changes in Outcomes
RELEVANCE OF EVALUATIONS

EVALUATIONS FOR IMPROVED PERFORMANCE

The extent to which the objectives of a programme/project are consistent with country and direct beneficiaries’ needs.

To what extent were the objectives of the programme still valid?

Relevance of the programme to the country’s needs and target group.

Are the activities of the programme consistent with the overall goal and the attainment of its objectives?

Are the activities of the programme consistent with the intended impacts & effects?
Efficiency is the extent to which the inputs (funds, expertise, time, etc.) were converted to outputs economically.

Compare alternative approaches to achieving the same outputs.

(1) Were activities cost-efficient? (Direct support versus outsourcing; relevance of skills required for a given activity.)

(2) Were objectives achieved on time?

(3) Was the programme/project implemented in the most efficient way, compared to alternatives?
Impact Evaluation

The positive and negative changes produced by a programme/project directly or indirectly, intended or unintended.

This involves the main impacts and effects resulting from the programme on the local social, economic, environmental and other development indicators.

(1) What has happened as a result of the programme/project?

(2) What real difference has the activity made to the beneficiaries?

(3) How many people have been affected?
Combination of **qualitative** (desk reviews, key informants interviews, focus group discussions, observations) and **quantitative** (household surveys, health facility surveys or other special surveys) methods need to be used and spelled out in this section.
Measuring the Performance of the National HIV/AIDS Strategy

Once the priorities and outcomes are identified, how should performance be measured?

- Performance of the HIV/AIDS strategy is measured through **outcome indicators**.

- For each indicator identify:
  - a **baseline** (what is the value now), and
  - performance **targets** (what value should one aim to achieve)
  - over the **time period** of the strategy.
After Selecting Indicators for the Strategy, Establish Performance Targets

Baseline Indicator Value

Desired Level of Improvement
Assumes a finite and expected level of inputs, activities, and outputs

Target Performance
Desired level of performance to be reached within a specific time

Current condom use among sex workers is 36%

Increase use of condom use by SWs by 50% in five years

Condom use by SWs will reach 54% by the end of the strategy time period

Source: Adapted from Ten Steps to a Results-based M&E System by J.Kusek and R. Rist, 2004, p. 91.
M&E systems: Key Features

- One M&E unit coordinating all M&E activities implemented by various actors
- One national multi-sectoral M&E plan built into the national strategic plan at the design stage
- One national set of standardised indicators endorsed by all stakeholders & reflecting country needs & capacities
Components of a M&E systems

- One national level information system

- Effective information flow between sub-national and national levels and among different national level actors

- Harmonised M&E capacity building strategy among all training providers at global, regional and national levels
SUMMARY OF EVALUATION STEPS

Evaluation plans contain a section covering the key steps to be taken from the planning to the reporting phases.

**Step 1: Developing a common agenda**
- Determine the study design
- Develop study instruments, including checklists, focus group discussion guide, key informants interview guides, questionnaires
- Recruitment of interviewers

**Step 2: Briefing/training the study team**
- Training should cover the objectives of the evaluation, contents and concepts, as well as interviewing techniques and discussions on quality control.

**Step 3: Data collection process**
**Step 4: Data processing**
**Step 5: Compilation and submission of draft report**
**Step 6: Submission and discussion of final report; follow-up plan**
Data Collection Methods and Instruments
Consider cost, time, and expertise requirements

- Conversation with concerned individuals
- Community Interviews
- Field visits
- Reviews of official records (MIS and admin data)
- Key informant interviews
- Focus Group Interviews
- Participant Observation
- Direct observation
- Questionnaires
- Panel Surveys
- One-Time Survey
- Field experiments
- Impact Evaluation
- Census

Informal/Less Structured Methods

More Structured/Formal Methods

Summary Messages: When to use Program Monitoring and When Evaluation

<table>
<thead>
<tr>
<th>Monitoring</th>
<th>Evaluation</th>
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<tbody>
<tr>
<td>Routinely collects data on indicators, compares actual results with targets</td>
<td>Analyzes why intended results were or were not achieved</td>
</tr>
<tr>
<td>Links activities and resources to their objectives</td>
<td>Assesses specific causal contributions of activities to results</td>
</tr>
<tr>
<td>Translates objectives into performance indicators and set targets</td>
<td>Examines implementation process</td>
</tr>
<tr>
<td>Clarifies Program Objectives</td>
<td>Explores unintended results</td>
</tr>
<tr>
<td>Reports progress to managers and alerts them to problems</td>
<td>Provides lessons, highlights significant accomplishment or program potential, and offers recommendations for improvement</td>
</tr>
</tbody>
</table>

1. M&E informs the Strategy Results Cycle by helping to identify strategic results in terms of expected outcomes.

2. Outcome indicators are used to measure the results of the national HIV/AIDS strategy.

3. Quantitative and qualitative targets (expected situation) measure the performance of the strategy against baselines (current situation values) for each indicator.

4. At the strategy level, the focus is on outcomes and selected milestones or final outputs indicators.
5. The strategy may also include longer-term impact and outcome indicators used for national and global reporting (such as MDGs or universal access).

6. Measuring indicators will require a combination of data, including: programmatic, tracking, surveys, surveillance, program reviews, impact evaluation and/or research studies.
A Public Health Questions Approach to HIV/AIDS M&E

What is the problem?  
- Situation Analysis and Surveillance

Are we doing them on a large enough scale?  
- Determining Collective Effectiveness
  - Outputs Monitoring & Evaluation
  - Quality Assessments

Are we doing them right?  
- Monitoring & Evaluating National Programs
  - Outputs Monitoring

Are we doing the right things?  
- Understanding Potential Responses
  - Needs, Resource, Response Analysis & Input Monitoring
  - Special studies, Operations research, Formative research & Research synthesis

ACTIVITIES

OUTCOMES

- Are interventions working/making a difference?  
  - Outcome Evaluation Studies

OUTPUTS

- Are we implementing the program as planned?  
  - Outputs Monitoring

INPUTS

- What are the contributing factors?  
  - Determinants Research

OUTCOMES & IMPACTS

- Are collective efforts being implemented on a large enough scale to impact the epidemic? (coverage; impact)  
  - Surveys & Surveillance

A NATIONAL HIV M&E SYSTEM
ELEVEN ELEMENTS

1. M&E Human Resources
2. M&E partnerships
3. M&E Framework
4. Costed M&E Work Plan (Road Map)
5. Strategic Information Flow
6. National HIV Database
7. Data Auditing and Supervision
8. Harmonised M&E capacity building
9. HIV learning and evaluation agenda
10. Advocacy & communication for HIV M&E
11. Data dissemination & use
Goals of a M&E system

- Track the spread of HIV & AIDS
- Track quality of life of those infected and affected (HIV response impact)
- Track the drivers of the epidemic (HIV response outcomes)
- Track HIV service delivery (HIV response outputs)
- Track provision of resources for HIV service delivery (HIV response inputs)
Conceptual Framework For M&E Operations Plan

A. INDICATORS
B. DATA SOURCES
C. INFORMATION PRODUCTS
D. STAKEHOLDERS
E. Management

A informed by B
B analysed to prepare C
C disseminated to D
D informed by E
E Management
Typically, in M&E plans....

More Focus

A INDICATORS

B DATA SOURCES

informed by

analysed to prepare

B C

Less Focus

D STAKEHOLDERS

C INFORMATION PRODUCTS

disseminated to
SUMMARY:
National HIV M&E Road Map

A costed, integrated, work plan of all HIV M&E activities

- Presents one coordinated set of activities
- One cost estimate for implementation
- It is a ‘Road Map’ of all HIV M&E activities

FOR RESULTS BASED STRATEGIC PLANNING

USE CORE UNGASS INDICATORS > TOWARDS 2008 & UNIVERSAL COVERAGE
WHAT ARE CORE UNGASS INDICATORS?

Quantitative variables which provide simple and reliable ways of measuring progress towards achieving the Declaration of Commitment on HIV/AIDS
CORE UNGASS INDICATORS

**National Indicators** (N=25)

Four categories:

1. National commitment and action
2. National programmes
3. Knowledge and behaviour
4. Impact

**Global Indicators** (N=4)
CORE UNGASS INDICATORS: NATIONAL INDICATORS

Four categories:
1. National commitment and action
2. National programmes
3. Knowledge and behaviour
4. Impact
CORE UNGASS INDICATORS: NATIONAL INDICATORS

National indicators are important for two reasons:

1. They are used to evaluate the effectiveness of the national response

2. They are used to provide information on regional and global trends
MILLENIUM DEVELOPMENT GOALS (MDGs)

There are 8 MDGs:

- **Goal 6**: Combat HIV/AIDS, Malaria and other diseases
  - **Target**: Have halted by 2015 and begun to reverse the spread of HIV/AIDS
  - Following UNGASS indicators are used to monitor progress
<table>
<thead>
<tr>
<th>4 UNGASS Indicators to monitor MDG-6</th>
</tr>
</thead>
<tbody>
<tr>
<td>12) Current school attendance among orphans and among non-orphans aged 10-14</td>
</tr>
<tr>
<td>17) Percentage of women and men aged 15–49 who had more than one sexual partner in the past 12 months who report the use of a condom during their last sexual intercourse</td>
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<tr>
<td>13) Percentage of young women and men aged 15-24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission</td>
</tr>
<tr>
<td>22) Percentage of young women and men aged 15–24 who are HIV infected</td>
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</table>
## Global Indicators (4)

<table>
<thead>
<tr>
<th>1) Amount of bilateral and multilateral financial flows (commitments and disbursements) for the benefit of low- and middle-income countries</th>
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<tbody>
<tr>
<td>2) Amount of public funds for research and development of preventive HIV vaccines and microbicides</td>
</tr>
<tr>
<td>3) Percentage of transnational companies that are present in developing countries and that have workplace HIV policies and programmes</td>
</tr>
<tr>
<td>4) Percentage of international organizations which have workplace HIV policies and programmes</td>
</tr>
</tbody>
</table>
CORE UNGASS INDICATORS: NATIONAL INDICATORS

National Commitment and Action (2)

1) Domestic and International AIDS spending by categories and financing sources

2) National Composite Policy Index (NCPI)

Questionnaire divided into two sections:

Part A
(Government)
Strategic plan; Political support; Prevention; Treatment, care & support; Monitoring & Evaluation

Part B
(Non-government)
Human rights; Civil society involvement; Prevention; Treatment, care & support
### National Programmes (9)

3) Percentage of donated blood units screened for HIV in a quality-assured manner

4) Percentage of adults and children with advanced HIV infection receiving antiretroviral therapy

5) Percentage of HIV-positive pregnant women who received antiretrovirals to reduce the risk of mother-to-child transmission

6) Percentage estimated HIV-positive incident TB cases that received treatment for TB and HIV
### National Programmes (continued)

7) Percentage of women and men aged 15-49 who received an HIV test in the last 12 months and who know their results

<table>
<thead>
<tr>
<th>8) Percentage of most-at-risk populations who received an HIV test in the last 12 months and who know their results</th>
</tr>
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</table>

9) Percentage of most-at-risk populations reached with HIV prevention programmes
## National Programmes (continued)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
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<tbody>
<tr>
<td>10)</td>
<td>Percentage of orphaned and vulnerable children aged 0-17 whose households received free basic external support in caring for the child</td>
</tr>
<tr>
<td>11)</td>
<td>Percentage of schools that provided life-skills based HIV education within the last academic year</td>
</tr>
<tr>
<td>Knowledge and Behaviour (10)</td>
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<tr>
<td>-----------------------------</td>
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<tr>
<td>12) Current school attendance among orphans and non-orphans aged 10–14*</td>
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<td>13) Percentage of young women and men aged 15–24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission*</td>
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<td>14) Percentage of most-at-risk populations who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission</td>
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*Millennium Development Goals indicator*
### Knowledge and Behaviour (continued)

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<tr>
<th>Indicator</th>
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<tbody>
<tr>
<td>15)</td>
<td>Percentage of young women and men aged 15-24 who have had sexual intercourse before the age of 15</td>
</tr>
<tr>
<td>16)</td>
<td>Percentage of women and men aged 15–49 who have had sexual intercourse with more than one partner in the last 12 months</td>
</tr>
<tr>
<td>17)</td>
<td>Percentage of women and men aged 15–49 who had more than one sexual partner in the past 12 months reporting the use of a condom during their last sexual intercourse*</td>
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*Millennium Development Goals indicator*
### Knowledge and Behaviour (continued)

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<table>
<thead>
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<tbody>
<tr>
<td>18)</td>
<td>Percentage of female and male sex workers reporting the use of a condom with their most recent client</td>
</tr>
<tr>
<td>19)</td>
<td>Percentage of men reporting the use of a condom the last time they had anal sex with a male partner</td>
</tr>
<tr>
<td>20)</td>
<td>Percentage of injecting drug users reporting the use of a condom the last time they had sexual intercourse</td>
</tr>
<tr>
<td>21)</td>
<td>Percentage of injecting drug users reporting the use of sterile injecting equipment the last time they injected</td>
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### CORE UNGASS INDICATORS: NATIONAL INDICATORS

#### Impact (4)

<table>
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<th>Description</th>
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<tbody>
<tr>
<td>22</td>
<td>Percentage of young women and men aged 15–24 who are HIV infected*</td>
</tr>
<tr>
<td>23</td>
<td>Percentage of most-at-risk populations who are HIV infected</td>
</tr>
<tr>
<td>24</td>
<td>Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy</td>
</tr>
<tr>
<td>25</td>
<td>Percentage of infants born to HIV-infected mothers who are infected</td>
</tr>
</tbody>
</table>

*Millennium Development Goals indicator*
Which UNGASS indicators should countries report?

- **No** distinction between Generalized Epidemic Indicator Set & Concentrated /Low-prevalence Epidemic Indicator Set

- Most national indicators are applicable for all countries

- Countries are expected to "know their epidemic"
Which UNGASS indicators should countries report?

When countries choose not to report on a particular indicator, an explanation needs to be provided:

*Either,*

- The indicator is not applicable to the epidemic
- The indicator is applicable, but no data is available
1. Planning

Has a data process for UNGASS reporting with roles and responsibilities been established and shared with all relevant partners?

2. Gathering Data

Have data and related information been collected in a timely manner and collated from multiple sources for each indicator?

3. Understanding Data

Have the characteristics and quality of the available data been assessed and strengths and limitations understood?

4. Consensus on Data

Has a collaborative consultation with relevant partners to reach consensus on indicator values taken place and been documented?

5. Use of Data

Have a comprehensive data analysis and findings been included in the Country Progress Report, endorsed by all relevant stakeholders?

DATA PROCESS FOR UNGASS REPORTING: the WHAT
STEPS FOR IN-COUNTRY UNGASS REPORTING PROCESS

1. Preparation
2. Planning
3. Implementation
4. Submission

Monitor against action plan
OVERVIEW OF THE REPORTING PROCESS

- Identify data needs, data sources, stakeholders, funds
- Establish plan for data collection, analysis and reporting writing
- Secure funds, collect/collate and analyse data, complete data forms
- Draft Country Progress Report, share draft with stakeholders
- Enter data in CRIS
- Validate the narrative report against the data in CRIS
- Reach consensus with stakeholders on final Report & submit timely
SUMMARY & CONCLUSION

PURPOSE:

- EXPAND KNOWLEDGE
- INCREASE SKILLS

FOR RESULTS BASED STRATEGIC PLANNING