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| AFYA BORA CONSORTIUM GLOBAL HEALTH LEADERSHIP FELLOWSHIP PROGRAM |
| MONITORING AND EVALUATION MODULE: Participant Guide |
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| The blue boxes contain information that highlights the intention of the exercise.  |

**AFYA BORA CONSORTIUM**

**MONITORING AND EVALUATION MODULE**

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Guide for Fellows

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**M&E Curriculum Module for Afya Bora Fellowship**

**Agenda**

# **BACKGROUND/CONTEXT**

Monitoring and evaluation (M&E) systems, when fully functioning, provide a critical information and evidentiary foundation within an organization to ensure that programs and services are tailored appropriately for users and implemented effectively. Well-constructed monitoring and evaluation systems are reflective of overarching program goals and reflect intended outcomes.

In the context of international public health, M&E also provides a mechanism for accountability and management of health programs. Higher levels of accountability and effective management is increasingly vital given the need for public health services in resource constrained settings as well as the challenges faced by national governments in responding to country needs.

While M&E involves the generation, synthesis, and analysis of data, the fundamental purpose for M&E is using data to guide, improve, and advocate for programming. M&E requires technical expertise in a range of areas but is only effective when it is integrally linked and practically applied to programming. Ideally, M&E is carried out collaboratively among all decision-makers which would include public health providers, health beneficiaries and M&E experts. The M&E experts should be technically capable and skilled at coordinating the multiple and complex components of an M&E system. The overall goal is to create M&E programs that respond to and support the information needs of an array of stakeholders – from program beneficiaries and providers to national governments and other donors.

# **Module Goals**

The overall goal of the M&E Curriculum Module is as follows:

To strengthen M&E capacity of ABC scholars through enhanced understanding and application of M&E concepts, tools, approaches and use of data for evidence-based programmatic decision making.

The focus is on components of M&E as well as the strategic issues and practical considerations that guide the effective use of M&E in public health settings in resource constrained areas.

Instructional approaches include a mix of didactic presentations, group work, discussion and application exercises. This module is organized into major sections and begins with a broad overview of M&E in global health programs. We then move to specific interrelated components that make up more complex M&E systems. We will use examples and exercises throughout the module to provide a practical and applied focus on the use of M&E in a public health context.

**Overall Learning Goals**

This module focuses on monitoring and evaluation for global health programs. By the end of the week-long training the Fellows will be able to do the following:

* Explain basic terms and concepts used in evaluation of global health programs.
* Understand and explain the role of evaluation in planning and implementation of global health programs.
* Apply an evaluation framework to their work in global health.

**Concrete deliverables are as follows**:

1. On the second day, participants will submit a logic model outline for their own project work related to their attachment site (or relevant to the institution/agency they are presently involved with).
2. On the final day of the module, participants will present an M&E plan for one of their organization’s projects and defend it to the group.

# **Module Competencies**

At the completion of the module the ABC Fellows will demonstrate competencies in the following areas:

1. Describe the key concepts of Monitoring & Evaluation -
2. Use a logic model tool as a framework for expected program inputs, outputs, outcomes and impacts
3. Explain how M&E links to programs
4. Describe how indicators can be used to monitor program outputs
5. Select and customize indicators that can be used for program-specific questions
6. List key concepts, tools and processes for ensuring data quality
7. Map the data flow within participants’ attachment/work site project
8. Identify approaches to statistical and descriptive analysis
9. Analyze data from your attachment/ work site program using descriptive and statistical methods
10. Identify strategies for drawing conclusions and making recommendations based on analysis
11. Explain how to synthesize and communicate data to answer key priority questions
12. Name the types of evaluation and explain what questions each type can address
13. Describe the process of how to prepare and plan for data use: how data can be applied to decision making and program planning
14. Develop an M&E plan

**Notes about the module:**

Each section begins with an outline of the materials and provides learning objectives for each day.

All suggested readings have citations listed in the reference section.

At the end of each day, there is a space for personal reflection of the day’s activities and lingering questions.

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| **Directions:** Please list three learning goals for this module. Select goals that can be measured across the module but may also be used through the fellowship. Examples may include the following: Explain why programs should have an M and E component or describe the components of a logic model.  |

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| Participant Learning Goals for the M & E Module |
| Please list three goals you hope to achieve following this module. These goals can be broad or more specific depending on your pre-existing knowledge of the course materials. At the week’s end, we will ask you to reflect on whether these learning goals were met. |
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# **MODULE SCHEDULE: Monitoring and Evaluation**

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| TIME | Day of the week |
| DAY 1 | DAY 2 | DAY 3 | DAY 4 | DAY 5 |
| 08.30-09.30 | ***Session 1.1***Introduction/ExpectationsPre-evaluation | ***Session 2.1***Logic Model Presentations | ***Session 3.1***Exercise 5: Data Quality | ***Session 4.2***Exercise 8: Data Presentation | ***Session 5.1***Final M&E Plan Presentations |
| 09.30-10.30 | ***Session 1.2*****Lecture:** M&E Overview  | ***Session 2.2***Logic Model Presentations | ***Session 3.2***Lecture: Data Analysis | ***Session 4.3***Data Presentation Feedback | ***Session 5.2***Final M&E Plan Presentations |
| 10.30-11.00 | TEA BREAK |
| 11.00-13.00 | ***Session 1.3*****Lecture:** Developing the program logic | ***Session 2.3***Lecture: Data Collection and Data Flow | ***Session 3.3***Exercise 6: Data Analysis | ***Session 3.5***Preparation time for final M&E presentation | ***Session 5.3***Final M&E Plan Presentations |
| 13.00-14.00 | LUNCH BREAK |
| 14.00-15.00 | ***Session 1.4****Exercise 2*: SMART Objectives | ***Session 2.4***Exercise 4: Data Collection and Flow | ***Session 3.4***Lecture: Data Presentation and Use | ***Session 4.4***Exercise 9: M&E Plan assessment | ***Session 5.4***WRAP UP:Lessons learned |
| 15.00-16.30 | ***Session 1.5*****Lecture:** Logic Model Overview  | ***Session 2.5***Lecture: Data Quality  | ***Session 4.1***Exercise 7: Data Use | ***Session 4.5***Potential M&E Panel from Host Country Experts or Case Study | ***Session 5.5***WRAP UP:Lessons learned |
| Homework: Exercise 3: Logic Model assignment | Homework: Data Quality | Homework: Generic M&E plan quick review | Homework: Preparation for final M&E plan |  |
| 16.30-17.00 | TEA BREAK |

# **Day 1: INTRODUCTION TO M&E: PLANNING AND USE OF LOGIC MODELS**

This day provides a brief overview of Monitoring and Evaluation and outlines the various components of fully functioning M&E systems. We will also examine the relationship between the various components of an M&E plan. The terms and concepts introduced in this first day will be reviewed in more detail as we move through the week and complete assigned exercises.

Following the overview lecture, participants will do an exercise using SMART criteria to develop objectives. A lecture on the types of evaluation and the various design options for evaluation programs follows. This will review various approaches to evaluation, and the methods used to answer the evaluation questions. Participants will then be introduced to the Logic Model as a tool for developing and organizing evaluation programs. Fellows will be provided with a logic model worksheet so they may apply this framework to their own work, existing or envisioned. See appendix. 32.

**Learning Objectives: -**

**ABC Fellows will be able:**

* To define the key components of M&E systems
* Describe the difference between indicators and targets
* Develop objectives that fit SMART criteria
* Understand advantages or using qualitative versus quantitative data
* To understand and explain the use of a Logic Model
* To develop a Logic Model for a real or planned program or project

## Session 1.1: Introduction, expectations and pre-module evaluation.

* Fellows and facilitators will start by introducing to each other
* Fellows will be requested to mention their learning expectation in the M&E module and facilitators will write them down on a flip chart to be reserved to the end of the week.

## Exercise 1: Why M&E?

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| ***Intention****: This section will provide you the opportunity to think about prior monitoring and evaluation experiences in which you have been involved.* *You will be asked to think about the challenges and benefits of the M&E process.* |

* Fellows will also fill a form to express their understanding of M&E before training and this will be compared to the understanding after the training (appendix 1)

## Session 1.1: Lecture: M&E Overview

This lecture will explain why M&E is important to programs. Instructors will review the basic components and vocabulary of M&E, including inputs, activities, outputs, impacts, goals and objectives, and indicators. Instructors will introduce acriterion for developing objectives (SMART). These components will be revisited throughout the module, but it is crucial for fellows to understand these basic concepts. Questions are encouraged, and instructors will spend time explaining the differences, for example, between outcomes and outputs. The lecture will provide concrete examples of these various distinctions.

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| **Intention:** The lecture is designed to introduce participants to the following: 1. Concepts and terms used in evaluation of global health programs.
2. Understand the role of evaluation in planning and implementation of global health programs.
3. How to apply an evaluation framework to your projects in global health
 |

## Session 1.3: Lecture: Developing the program Logic

This lecture describes the various types of evaluation: formative, process and outcome. Students should understand the different goals of these types of evaluation as well as when each one would be appropriate to use in a program’s development. This lecture will also describe how indicators can be used to monitor program elements, elaborate approaches for selecting and customizing indicators that can be used for program-specific questions. Lastly to describe how to select indicators to answering key public health questions about programs. Students familiar with various research methods will find this to be a review of these concepts.

## Session 1.4: Exercise 2: SMART Objectives Exercise

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| This exercise is designed to orient fellows to the importance of designing SMART objectives. Completed the worksheet, discuss the SMART criteria and express your possible suggestion. See Appendix 7 for the worksheet. |

Writing SMART objectives also helps you to think about and identify elements of the evaluation plan and measurement, namely indicators and performance measures.

An indicator is what you will measure to obtain observable evidence of accomplishments, changes made, or progress achieved. Indicators describe the type of data you will need to answer your evaluation questions. A SMART objective often tells you what you will measure.

Fellows should use their familiar projects or develop new projects from their program logic exercise to fulfill the following learning objectives.

1. To practice the development of goals and objectives
2. To practice the development of smart objectives and indicators
3. To practice the setting of realistic targets

Steps:

1. Recall your program or project
2. Develop a goal
3. Develop associated objectives
4. Form your list of objectives and make them SMART

A performance measure is the amount of change or progress achieved toward a specific goal or objective. SMART objectives can serve as your performance measures because they provide the specific information needed to identify expected results.

**IN-CLASS EXERCISE**:

Take the following objectives and “make them SMART.”

1. Increase the number of Global Health Program partners.

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2. Train nurses on clinical practice guidelines. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Enhance HIV policy to decrease HIV deaths in 2013. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. By May 2013, increase by 10% the percentage of city residents that know the signs and symptoms of HIV and tuberculosis. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. Increase the number of work sites that adopt malaria bed-net distribution. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Session 1.5: Lecture: Logic model overview

* This lecture describes what a logic model is or how it is defined, also Why should one use a logic model for developing program evaluation, what are the basic elements of a logic model? And how to read a logic model.

## Homework: Exercise 3: Logic model worksheet:

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| **Intention:** Fellows will be introduced to a Logic Model that they may use in order to develop an M&E plan.If a Fellow does not have a particular organizational context they should identify an organization from another area of their studies or experience. This can include prior academic institutions. If a Fellow does not have an organizational context, they may be assigned one. The organization should be one where Fellows can gather information on-line. Examples might be some of the attachment organizations (AMREF, etc.) or organizations like UNICEF. Fellows can choose programs within these organizations to use as the basis for these assignments. Some assumptions will obviously have to be made on the Fellows’ part as they work through these exercises. The instructor should review selected organizations with the Fellows to ensure that each person has identified a specific program within a specific organization. Instruct the Fellows to make assumptions if they don’t know certain facts about the organization. For example, Fellows can make assumptions on the population served or number of employees. This exercise is designed for Fellows to think through the underlying processes of M&E rather than finding “correct answers.  |

Logic Models: As described in the lecture, a logic model is a way to frame a program in a way that informs the evaluation. It can organize the program components and their relation to ultimate outcomes (the things everyone cares about) so they make sense to stakeholders, evaluators, and participants. For your own programs you will be asked to present an M&E plan on the last day of this week. Tonight, you will work on developing a logic model for that program (real or imaginary), which will help inform the M&E plan.

**USE THESE INSTRUCTIONS AND THE WORKSHEET BELOW (APPENDIX 2) TO DEVELOP YOUR LOGIC MODEL:**

One key value of a logic model is that it displays the chain of connections showing how a program is expected to work in order to achieve desired results. When you use a table or chart and list items in the input, output, and outcome columns you may lose the opportunity to show connections among and between items. This worksheet uses boxes that you connect by arrows to show the sequence of events. You may call this your theory of change, your program theory, or theory of action. When finished, such a logic model will explicitly show the assumed connections linking inputs to outcomes.

This worksheet provides a starting framework. It is only a guide, and you may have more or less boxes and you may decide to arrange them differently on your sheet. You might begin simply by filling in some items in each box (INPUTS, OUTPUTS, etc.). Next, explain how the boxes relate to each other by drawing connecting lines and arrows. Sometime feedback loops and double directional arrows are necessary. In this way, you can display both the sequence and the interaction of effects. You may want to use a few sheets to paper to try different ways to draw your logic model, after you have filled in some of the basic components in the worksheet.

Remember, the model does not have to be linear or read from left to right. You might draw a vertical logic model that reads from top to bottom or bottom to top. A circle may better express your program or components within a program.

In the early stages of developing a logic model, give yourself plenty of space. Later, you can transfer your work to a one-page, neat copy. It is often helpful to color code chains of connections or specific sections of your logic model.

A logic model conveys the story of your program. It does not show all the detail and it is not an exact representation. However, it should depict those aspects that stakeholders feel are important and essential for showing how the effort works. If a logic model becomes too complex, consider creating “nested” models where each separate model captures a different level of detail or scope.

There is a space on the worksheet to list assumptions. It may be less complicated to list these on a separate sheet. However, don’t forget to carefully think about and list the beliefs and ideas you and others have about how and why you think the program will work. Often, inaccurate or overlooked assumptions are the reason for unsatisfactory results.

Also there is a space on the worksheet for external factors. Again, it may be less complicated to list these on a separate sheet. These are part of the environment in which the program exists, that often influence how well the program succeeds and over which we may have little control.

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| **Daily Reflections** |
| Describe one or more key learning point from today and how you feel it will help you in your professional work moving forward. |
| Were there any questions left unanswered for you from today’s materials? |

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# **DAY 2: DATA COLLECTION, DATA FLOW AND REPORTING, AND DATA QUALITY**

In order for data to be used to support programs, Fellows must understand the context of data generation, collection, and flow. This section provides general guidelines and principles for ensuring functional data collection systems and reporting processes. We will introduce key topics, key tools, and processes used for data collection. We will then present how data may flow within organizations and from organizations through district, regional, and national reporting structures. Lastly, we will examine strategies for ensuring well-functioning data collection, flow, and reporting processes at multiple levels.

Critical to the value and utility of data is the quality of the data that are generated, collected, reported, and fed back into program for program improvement and decision making. This section will provide an overview of key concepts, tools and processes for ensuring data quality, strategies for collaboration among M&E, service providers, decision makers and other stakeholders for ensuring data quality, and critical points for data quality checks and interventions in the context of data flow.

**Learning Objectives:**

**ABC Fellows will be able:**

* To understand and describe key issues and processes for data collection, data flow, and reporting.
* To apply key issues to data flow within participants’ organizations.
* To understand and explain key concepts, tools, and processes for ensuring data quality
* To understand and explain strategies for ensuring data quality
* To apply concepts, processes, and strategy to ensure data quality at the organizational level

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| **Intention:** Fellows will present their logic model based on the previous day’s assignment in order to share their work with the broader group. The exercise is designed to engage Fellows in discussions regarding the assumptions underlying their logic model and how their program is expected to generate information for monitoring work to achieve desired results. |

## Sessions 2.1 and 2.2: Presenting Logic Models:

For this exercise, Fellows will be asked to present their logic models in smaller groups. Each group member should take 5-10 minutes presenting their logic model. For each presentation, group members should note whether all the components of the logic model have been filled out and if the model makes sense. If components of the model are missing, the presenter should explain why, and the group and/or instructor may make suggestions to help fill in these components. Each member of the group is expected to provide feedback to the presented. Once completed, the groups will come together to discuss any questions that surfaced in the individual cases or from the logic model concept in general.

## Session 2.3: Lecture: Data collection and flow:

The lecture on data collection, flow and reporting will revisit some of the issues brought up yesterday. The focus, however, will be on what types of data might be useful to answer questions about whether a program or parts of a program, are achieving what they are supposed to. This lecture will examine issues in respect to types of data collected and the data collection process. This lecture will also examine appropriate strategies to report data. The instructor will emphasize how good data flow helps improve data quality (a topic we will move on to later in the day).

## Session 2.4: Exercise 4: Using Data - Collection, Flow, and Reporting

Data Reporting Exercise:

In small groups, discuss and outline the following using one of the attachment site programs, or if this is not available, use a program or project you know sufficiently (25 minutes).

What are the main tools your program uses for data collection for various program services? What are the key challenges with data collection and how has the program responded?

Map out the flow of data in your program – both internal and external. Identify areas of data flow that are particularly challenging and how have you responded.

Report Back: Groups will be asked to report back on their responses to data collection and data flow challenges. Key issues will be discussed with instructor facilitation. (25 minutes).

## Session 2.5: Lecture - Data Quality:

Data quality is of great importance to the evaluation process. To paraphrase, if bad data comes in, bad results (conclusions, recommendations, actions) will result. This is also known as “garbage in, garbage out”. In the previous lecture and exercise, we looked at how to ensure data is properly and completely collected, a key component of ensuring data quality. In this lecture, we examine how to understand the effects of data quality errors. We also discuss further ways to ensure good quality data.

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| **Intention**: This lecture is designed to introduce the Fellows to the key concepts, tools, and processes for ensuring data quality. In addition, Fellows will understand and explain strategies for ensuring data quality, |

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## Homework: Exercise 5: Data Quality:

Source: Data Quality Analysis Sheet and Kenya OSDV and Kenya2 OSDV

**Country Information**: Kenya,

**Disease:** HIV,

**Principal Recipient:** MOH

**Site**: Dassa Zoume Health Center

Directions:

The Global Fund Round 6 HIV/AIDS grant in Kenya has to undergo yearly onsite data verification. One of the indicators identified for verification is “Number of people with advanced HIV infection currently receiving anti-retroviral combination therapy”.

You have patient cards from the Dassa Zoume Health Center in the Collines districts. This health center has been following cohorts of ARV patients. You also have an ART register for Dassa Zoume. This ART register has been sent to the District and will then be submitted to the National Agency.

1. Based on the patient cards, recount how many patients were on ARV treatment in February 2005
2. The value of the indicator (patients on ARV treatment) reported by the Health Facility to the District is 61.
3. Data verification results at the Site Level should then be cross-checked with the ART register to cross-check for discrepancies.
4. In larger table groups write up your findings from this OSDV, including results.

Report Back: Groups will report back on their findings from the exercise to the full group. Were discrepancies found? What is the explanation? What would your next steps be?

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| **Daily Reflections** |
| Please reflect of one or two of the key concepts introduced in today’s materials. How will these concepts ensure data quality in M&E planning? |
| Were there any questions left unanswered for you from today’s materials? |

# **DAY 3: DATA ANALYSIS, DATA USE, DATA PRESENTATION**

## Data Analysis

Once data have been collected and cleaned using data management processes, the data must then be analyzed in order to answer key questions stakeholders may have about programming. In order to conduct an analysis that will produce findings that respond to stakeholder needs, it is critical to understand the various analytic approaches that can be used to facilitate the use of data. This lecture will provide an overview of various statistical approaches that can be used for analyzing program data.

**Learning Objectives**:

**ABC Fellows will be able:**

* Identify approaches to descriptive analysis
* Understand and explain the difference between the population and the sample
* Identify approaches to statistical analysis
* Understand and explain when to how to select and use appropriate statistical tests
* Apply analysis skills
* Identify approaches to interpreting data
* Apply interpretation of data skills

## Session 3.1: Exercise 5: Data Quality presentation

(The session will be presentations of the homework that was given the previous evening)

## Session 3.2: Lecture: Data Analysis

Once data have been collected and cleaned using data management processes, the data must then be analyzed in order to answer key questions stakeholders may have about programming. In order to conduct an analysis that will produce findings that respond to stakeholder needs, it is critical to understand the various analytic approaches that can be used to facilitate the use of data. This lecture will provide an overview of various statistical approaches that can be used for analyzing program data.

## Session 3.3: Exercise 6: Analysis and Presentation of Sample Data

The class with be split into three groups. Each group will have the same data—The Data Quality and Analysis Sheet with HIV care and treatment data from three districts in the country. Each group will be assigned one particular question of interest. Each group will work to answer the question of interest using the data provide. Groups will be expected to use Excel to visually display the data. This data analysis will be used for an exercise that is focused on developing message for stakeholders, later in the week.

Questions for each group:

Group 1: What is the percent of patients in the cohort who are alive and on ART at 12 months?

1. Does this percent differ by facility?
2. Does this percent differ by district?

Group 2: Which district had the highest proportion of deaths on ART at 24 months?

1. What does the national picture look like in terms of deaths on ART at 24 months?
2. Are there differences in mortality by urban/rural facility?

Group 3: What is the percent of the cohort that is on an appropriate first-line regimen at 6-months, by district and overall?

1. What is this proportion at 12-months? How about at 24 months?
2. Are there differences in this proportion by urban/rural facility?

## Session 3.4: Data Use Lecture

At the heart of M&E is the use of M&E data for program improvement, decision making, enhance client health, resource allocation and reporting to national governments and other donors. This lecture reviews guidelines and approaches for using data, with a focus on data use plans, a brief overview of data analysis, data interpretation, and communicating about data.

**Learning Objectives:**

**ABC Fellows will be able:**

* To outline the main ways data can be used to measure and evaluate program effectiveness
* To describe the process of how to prepare and plan for data use: how data can be applied to decision making and program planning
* Identify strategies for drawing conclusions and making recommendations based on data analysis
* To explain how data can be synthesized to answer priority questions
* To identify strategies to effectively communicate results from data collection and analysis

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| **Daily Reflections** |
| Please reflect on one or two of the key concepts introduced in today’s materials. Discuss why appropriate data usage is important to ensure data quality in M&E planning? |
| Were there any questions left unanswered for you from today’s materials? |

# **DAY 4: USE OF MONITORING DATA FOR PROGRAM ASSESSMENT AND RESULTS REPORTING**

The learning objectives of the day include;

* To understand the main ways data can be used
* To describe the process of how to prepare and plan for data use: how data can be applied to decision making and program planning
* Identify strategies for drawing conclusions and making recommendations based on analysis
* To explain how to synthesize and communicate about data to answer key priority questions
* To apply concepts to data from an organizational perspective

## Session 4.1: Exercise 7: Data Use

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| --- |
| **Instructor Note:** Fellows are expected to use examples from attachment sites or a prepared scenario or known organization. This exercise is designed to help fellows to understand key issues in data use and information dissemination in a Fellow’s organizations. |

In small groups, review and discuss the following case:

Scenario: Your organization is being funded to implement a pilot intensive and innovative peer led individual and small group level prevention intervention in a region within your country for persons at high risk for HIV. You have seen some success in the pilot program in the form of mobilizing and training peers as well as the geographic coverage area. However, given that the pilot is an intensive intervention, it reaches a small number of individual. As the pilot is drawing to a close, you must secure funding for scaling up the intervention. How would you use data and tailor communication (including messages and communication tools) for funding requests to the following stakeholders: ministry of health, international donors, religious groups, large NGOs, foundations, donations from the general public, donations from private individuals. Be sure to identify and respond to the unique needs of each stakeholder groups.

Report back on how you would tailor messages for various stakeholder groups, what data you could use in support of your program and the need for it to be scaled up and what data sources could you draw from to help support your case.

##

## Session 4.2 and 4.3: Exercise 8: Data Presentation

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| **Instructor Note:** Fellows are expected to use information generated from data analysis in exercise 6.This exercise is designed to help fellows to understand key issues in data presentation and appropriate dissemination package for different stakeholders. |

Return to your groups from Exercise 7, Data Use. You will draw upon the analysis, including the graphs, charts, or tables you created. Your group will now develop messages for the following stakeholders. You will communicate your findings to each of the following stakeholders. Ensure you tailor your message for each group.

Group 1: Donor organization providing funding for the ART in each of your facilities

Group 2: Monitoring and Evaluation Officer at the National AIDS Control Program

Group 3: District-level Health Officers in charge of procurement and distribution of ART

## Session 4.4: Exercise 9: M&E Plan Assessment

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| **Instructor Note:** Fellows are expected to use generic M&E plan for critique.This exercise is designed to help fellows to understand key issues to consider in identifying strength and weakness of their own M&E design based on generic M&E plan. |

The goal of this exercise is to allow Fellows to critique a general generic M&E plan. Fellows will be required to identify both strengths and weaknesses of an M&E plan. This exercise will provide a model for critiquing the individual presentations.

Materials needed: Generic M&E plan on your computer

In small groups, assess the generic M&E plan using the following questions:

* Which key components (organizations/partnerships, logic model, data systems, data use) do you see reflected in the plan?
* What areas of the plan seem well developed?
* What areas of the plan seem to be missing important information or details?
* Describe how useful the plan would be as a guide to actual implementation of M&E activities in an organization?

Report Back: Each group will be asked to report back on strengths and areas for improvement in the M&E plan.

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| **Daily Reflections** |
| Discuss why it is important to select appropriate indicators for program monitoring. |
| Were there any questions left unanswered for you from today’s materials? |

# **DAY 5: PROGRAM EVALUATION PRESENTATIONS**

**Applying the learning:**

Use the M&E Template (see Appendix 3) as a guide to develop an outline of an M&E plan for your organization. If you do not have a clear organizational attachment, then develop an M&E plan for an existing organization that you are familiar with.

First, fill out the Program Evaluation planning worksheet (See Appendix 3). Ensure you have included all aspects for your plan that have been discussed in the module. You will not have to include a Budget (section IV), as this was beyond the scope of this module. You also may find that there are items that you cannot include, but you should try to address each of the items in the template.

The M&E plan that you develop should be at least 1 page total. You may use bullet points for your outline. However, descriptions should be clear enough to present coherently to the group.

The plan should be organized into a word document that can be put up on the screen during the presentation. You may also want to have either a hard copy or electronic copy to share with the class.

Consider:

1. Select evaluation questions of interest or importance for your organization
2. List the question(s), design, data collection methods
3. Explain why you chose this particular design and method
4. Discuss for which stakeholders the answer to this question might be relevant

Presentation Guidelines

* Try to incorporate or practice skills and concepts they have learned from previous modules (Leadership and Communications) into your brief presentations.
* Use of other media for the presentation (PowerPoint, excel, etc.) is encouraged, but should supplement, not replace the 2-page plan outline.
* Don’t attempt evaluation plans that are too big or ambitious. The more specific and feasible, the more detail you can likely address in your plan. **During each presentation, everyone should listen attentively. One fellow will be called upon to offer a brief critique of the strengths and weaknesses of the plan before opening up discussion for feedback from the whole group.**
* Each presentation should be no more than 7 minutes. Feedback will be no more than 7 minutes total, focusing on the major feedback points. The faculty will bring up general learning points from each presentation.

# **APPENDICES**

## Appendix 1: PRE AND POST MODULE SELF EVALUATION

This pre-module self-evaluation is designed for individuals to consider their pre-existing knowledge and skills in the area of Monitoring and Evaluation. It will also provide instructors with information regarding the participants’ knowledge and familiarity with the concepts. Please complete the self-evaluation prior to the start of the module.

1. Name three reasons to do program monitoring and evaluation:
2. Name three types of evaluation:
3. Match the following types of evaluation with the question it answers:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Questions** | **Match** |  | **Answers** |
| A | Formative evaluation |  | 1 | How was the program implemented? |
| B | Process evaluation |  | 2 | Did the program meet its objectives? |
| C | Outcome Evaluation |  | 3 | Was the ultimate goal of the program achieved? |
| D | Impact evaluation |  | 4 | What’s necessary to carry out the program in accord with the desired goals and objectives?  |

1. What is difference between a logic models and an evaluation plan?
2. Describe the criteria of SMART objectives.
3. List three types of indicators that can be utilized to measure HIV programming targeted to reducing mother/child transmission.
4. Why is the selection of the appropriate indicators important to measure program efficacy?
5. What are some guidelines that should be followed when selecting program indicators?
6. What are three possible data collection strategies to consider when devising a data collection plan?
7. Who should be involved in developing a data collection plan?
8. What are the main types of data analysis used for M&E data?
9. What factors are important when thinking about how to disseminate data?

## Appendix 2: PROGRAM LOGIC MODEL FOR PROGRAM EVALUATION

| **SITUATION:** |
| --- |
|  |

| **PRIORITIES:** |
| --- |
|  |

| **INPUTS** | **OUTPUTS** | **OUTCOMES** |
| --- | --- | --- |
| **Activities** | **Participants** | **Short-term** | **Medium-term** | **Long-term** |
|  |  |  |  |  |  |

| **ASSUMPTIONS** | **EXTERNAL FACTORS** |
| --- | --- |
| 1. 2. 3. 4. 5.  | 1. 2. 3. 4. 5.  |

## Appendix 3: SAMPLE TEMPLATE FOR M&E PLAN

1. Background / Contextual Information
2. Program Goals and Objectives – why an M&E plan?
3. Organizing Framework of Monitoring and Evaluation System
	1. Organizational Structures with M&E Functions
	2. Human Capacity for M&E
		1. Existing capacity
		2. Gaps and plan for building capacity
	3. Partnerships for M&E
	4. Communication, Advocacy, Culture for M&E
	5. Routine programmatic performance monitoring
		1. Framework (logic model, results framework)
		2. Indicators,
		3. Targets
		4. Data sources
		5. Data Flow
	6. Programmatic M&E Database
		1. Data Management
	7. Surveillance and Surveys
		1. Use of national / external data sources
	8. Supportive Supervision and Data Auditing
		1. Data quality procedures
		2. Capacity development plan, including supportive supervision
	9. Evaluation and Research Agenda
		1. Use of relevant external evaluation and research data
		2. Key internal evaluation questions and plan to assess
	10. Data dissemination and use
		1. Internal data use and dissemination
		2. External data use – stakeholders, advocacy, funding
4. M&E Budget /Annual Costed M&E Implementation Plan
5. Workplan and Timeline
6. Indicator Reference Sheets – Definition of Indicators, including sources, timing for data collection

## Appendix 4: CASE STUDY – MONITORING AND EVALUTION MODULE (2012)

The Afya Bora Kwetu (ABK) “Good Health for us” is a small NGO at Ikwiriri subdivision of Rufiji district, Tanzania. ABK mission is to improve access to and quality of HIV/AIDS care services provided by the public health centers and enables community to take more proactive approach in their health seeking behavior. Their vision is to see people even in the most remote communities are healthy and have access to appropriate and effective health care system. The Public Health centres provide both voluntary counseling and testing (VCT) to all pregnant women as well drugs for prevention of mother to child transmission (PMTCT) services. The ABK provides the community mobilization, networking and IEC services to 22 communities. The total population in these communities is 36,000 people. The ABK works closely with the public health centers in their target communities.

Initial desired results were that “The ABK will help communities to be informed about health and health care”. From the baseline survey which was done in recent delivered women all 22 communities, at least 85% of the women knew one preventive way to avoid HIV, 60% knew risk of MTCT can be reduced by mother taking special drugs during pregnancy, 60% had received voluntary counseling and testing, of which 11% tested positive for HIV; only 25 % of those in need of ARV have been enrolled in care and treatment services. ABK would like to meet the national treatment and care goal of linking all HIV positive mothers from PMTCT to the Care and treatment clinics.

ABK team defined and analyzed the obstacles they had to overcome and then come up with a plan that explained the specific activities to implement their priority interventions to address their challenges. Based on their root cause analysis of the obstacles the ABK team decided that their three priority interventions would focus on: 1. improving the health centers provision of testing, care and treatment services; 2. organizing campaigns promoting safer sex in the selected communities. This is in order to halt incidence HIV infection and then provide care and treatment to ensure 100% of those in need of ARV should access and receive ART at the end of the year 2012.

The ABK in collaboration with the District Medical Officer, planned to improve supervision of health facilities to ensure better services provision, prevent stockout of essential drugs, supplies (condoms) and improve performance of Anti-retroviral drug supply in system in the district all the time. Toward the end of the year there will be an evaluation on essential indicators to monitor the quality of implementation of the planned interventions.

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**Questions**

Assume that you are a member of ABK team. Use Logic Model approach to satisfy the following requirements

1. Write a logic model to show ABK contribution to the National treatment goal for HIV/AIDS
2. List three types of indicators that can be used to measure progress towards National treatment goal.
3. What will be the indicators to monitor achievement contributed by ABK?
4. What will be the indicators and sources of data to verify achievements of district plans related to national goal for reducing HIV transmission?

## Appendix 5: EVALUATION RUBRIC FOR PRESENTIONS

Presenter #: Presentation Topic:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Excellent | Very Good | Good  | Fair | Needs Improvement |
| Were the evaluation questions appropriate for the selected organization? |  |  |  |  |  |
| Was the design of the M & E plan appropriate for the evaluation questions? |  |  |  |  |  |
| Did the presenter select appropriate data collection methods given their evaluation questions? |  |  |  |  |  |
| Did the presenter effectively explain their reasoning for choosing the particular design |  |  |  |  |  |
| Did the presenter effectively explain why they chose their reasoning for choosing the particular methods? |  |  |  |  |  |
| Did the presenter select stakeholders that would be interested in their project |  |  |  |  |  |
| Strength of ideas - Did they make their argument convincingly? |  |  |  |  |  |
| Did the presenter use modules techniques or concepts effectively? (i.e logic model, SMART objectives, etc.) |  |  |  |  |  |
| Did the presentation materials add value to the presentation and were they clear? (if applicable) |  |  |  |  |  |
|  How well do you think the presenter performed overall? |  |  |  |  |  |
| Did the presentation follow the time frame? |  |  |  |  |  |

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|  |

Additional Comments (This in an anonymous evaluation that will be made available to Fellows and instructors).

## Appendix 6: REFERENCES AND SUGGESTED READINGS

UNGASS Guide to Data Quality Assessments

Kusek, J.Z., Rist, R.C. (2004). Ten Steps to a Results Based Monitoring and Evaluation System. Washington, DC: The World Bank, pp. 1-248.

Uganda UNGASS Progress Report, Jan 2008-Dec 2009. Pp. 1-103.

United Nations General Assembly Special Session on HIV/AIDS (2010). Monitoring the Declaration of Commitment on HIV/AIDS: Guidelines on Construction of Core Indicators (2010 Reporting). Geneva, Switzerland: UNAIDS, pp. 1-140.

Weiss, C. (1998). Evaluation: Methods for studying programs and policies (2nd Ed). Upper Saddle River, NJ: Prentice Hall.

## Appendix 7: SMART OBJECTIVES

**SMART** stands for:

**S**pecific

**M**easurable

**A**ttainable/Achievable

**R**elevant

**T**ime-bound

Specific—What exactly are we going to do for whom?

The “specific” part of an objective tells us what will change for whom in concrete terms. It uses clear language to describe the population or setting that the objective will focus on, and specific change(s)that the objective hopes to achieve. In some cases it is appropriate to indicate how the change will be implemented (e.g., through training, or through implementation of the Chronic Care Model). Coordinate, partner, support, facilitate, and enhance are not good verbs to use in objectives because they are vague and difficult to measure. On the other hand, verbs such as provide, train, publish, increase, decrease, schedule, or purchase indicate clearly what will be done.

Measurable—Is it quantifiable and can WE measure it?

Measurable implies the ability to count or otherwise quantify an activity or its results. It also means that the source of and mechanism for collecting measurement data are identified, and that collection of these data is feasible for your program or partners.

A baseline measurement is required to document change (e.g., to measure percentage increase or decrease). If the baseline is unknown or will be measured as a first activity step, that should be indicated in the objective, for example, “baseline to be determined using CDC database, 2011.” The data source you are using and the year the baseline was obtained should always be specified in or adjacent to your objective statement. If a specific measurement instrument is used, you might want to incorporate its use into the objective. For example, “By June 2011, increase the proportion of physicians at the Migori District Clinic who are 100% compliant with the WHO Guidelines from 70% to 80% as measured by the Physician Guideline Self-Assessment Tool.” specifies not only the performance measure, but the data source as well.

Another important consideration is whether change can be measured in a meaningful and interpretable way given the accuracy of the measurement tool and method. For example, to estimate population awareness of the signs and symptoms of heart attack, we can estimate awareness using a sample of the district population. Since this is an estimate, there is a chance of error associated with it—usually expressed by a confidence interval (the point estimate, plus or minus an estimate of variability). Projecting a very small change in population awareness, although measurable, might not be meaningful because the change projected falls within expected variability or within the bounds of the confidence interval for population awareness.

Attainable/Achievable—Can we get it done in the proposed time frame with the resources and support we have available?

The objective must be feasible with the available resources, appropriately limited in scope, and within the program’s control and influence. Sometimes, specifying an expected level of change can be tricky. To help identify a target, one can speak with an epidemiologist, look at historical trends, read reports or articles published in the scientific or other literature, look at national expectations for change, and look at programs with similar objectives. Consult with partners or stakeholders regarding their experiences. Often, talking to colleagues who have implemented similar programs or interventions can provide you with information about expected change.

In some situations, when discussing impact, it is important to consider the actual number of people positively affected by the intervention, rather than just the percentage of change. Will the effort required to create the amount of change be a good use of your limited resources?

For example, our intervention might be intended to increase awareness of the symptoms of malaria and the need to go to a clinic for treatment among patients in a district-wide health clinic system. If as a result of our intervention we measure a 5% increase in awareness among all clinic patients, but 5% of our population is a very small number, we might want to consider the cost of the intervention relative to the number of people affected. We could choose to enhance the intervention for a greater impact or not implement that intervention again.

Relevant—Will this objective have an effect on the desired goal or strategy?

Relevant relates to the relationship between the objective and the overall goals of the program or purpose of the intervention. Evidence of relevancy can come from a literature review, best practices, or your theory of change. For district HIV programs, the objective should accomplish one of the following:

• Directly lead to achieving or enhancing one of the required recipient activities.

• Directly lead to a desired change in one of the Ministry of Health priority areas (increasing Voluntary Testing and Counseling, increasing knowledge of signs and symptoms, improving PMTCT coverage, or eliminating disparity).

• Directly lead to a policy or system level change in a priority setting.

For example, although it may be important to public health, assessing the height and weight of high school students may not directly lead to change in an HIV priority area for an at-risk population. Also, the intervention focuses at an individual level rather than on a system change.

Time bound—When will this objective be accomplished?

A specified and reasonable time frame should be incorporated into the objective statement. This should take into consideration the environment in which the change must be achieved, the scope of the change expected, and how it fits into the overall work plan. It could be indicated as “By December 2010, the HDSP program will” or “Within 6 months of receiving the grant we will have accomplished...”

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ACKNOWLEDGEMENTS

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*This project was made possible by the Afya Bora Consortium Fellowship, which is supported by the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) through funding to the University of Washington’s International AIDS Education and Training Center (IAETC) under Cooperative Agreement U91 HA06801 from the Health Resources and Services Administration (HRSA) Global HIV/AIDS Bureau.*