Monitoring HIV/AIDS Programs: Participant Guide
A USAID Resource for Prevention, Care and Treatment

Module 9: Monitoring and Evaluating
Prevention of Mother-to-Child Transmission Programs

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Module 9:
Monitoring and Evaluating
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Learning Objectives

At the end of this session, participants will:

- Understand the components of PMTCT programs that should be monitored
- Develop/adapt PMTCT-specific process indicators
- Identify appropriate monitoring and evaluation methodologies and tools
- Have a better appreciation of different data uses and how the intended data use will affect data collection and analysis
- Identify possible evaluation questions and determine when an evaluation will be necessary for their programs
Overview of PMTCT Programs

PMTCT refers to prevention of mother-to-child transmission of HIV.

PMTCT efforts include four prongs:

1. Primary prevention of HIV among parents-to-be (e.g., through BCC)
2. Prevention of unintended pregnancies among HIV-positive women (e.g., through family planning)
3. Prevention of transmission from HIV-positive women to their infants (e.g., through provision of ART)
4. Follow-up for and linkages to long-term prevention, care, and support services for mothers, their children, and their families (PMTCT-Plus)

To reap the benefit of PMTCT interventions, women need access to adequate antenatal, delivery, and postnatal care, which includes:

- Early access to antenatal care (before 34-36 weeks)
- Voluntary counseling and testing
- A minimum package of antenatal care that includes vitamin supplementation and screening for and treatment of anemia and sexually transmitted diseases (to reduce both sexual and mother-to-child transmission of HIV)
- Delivery care by a skilled attendant, including optimal obstetric practices that may reduce the risk of transmission
- Counseling on infant feeding and care practices, and support of mother’s infant feeding choice

In addition, if VCT is promoted, women who are diagnosed HIV-positive must have access to long-term care and support. Follow-up for the mother and child include the following:

- Psychosocial support for the mother and child
- Medical care for the mother and child

Monitoring and Evaluation in Context of PMTCT

Monitoring and evaluation of PMTCT programs will:

- Help to determine whether existing health services are adequately prepared for the introduction of PMTCT interventions
- Identify areas for improvement in antenatal care and maternal and child health (MCH) services and ways to integrate PMTCT services to ensure that PMTCT interventions are safe and effective when introduced
- Identify weaknesses in the PMTCT management information system (MIS) and tracking system (e.g., poor client follow-up)
- Offer guidance on ways to provide and maintain high-quality services
- Support program implementation by providing ways to use lessons learned to improve health activities and promote better planning
What to Monitor

1. Definition of Monitoring

Monitoring is:

Tracking the key elements of an ongoing program over time (inputs, process, outputs, and quality). Monitoring answers the questions: “To what extent are planned activities actually realized? How well are these services provided?” Monitoring also assesses the extent to which a program is undertaken consistent with its design or implementation plan.

Some of the key issues that must be considered when monitoring a PMTCT program include:
- Stigma
- Reporting requirements of host district, state, region, or government
- Confidentiality
- Explanation of HIV test and test results
- Psychological/emotional support
- Appropriate referral
- Documentation of care
- Partner disclosure
- Discordant couples
- Collection of monitoring data for postnatal services

2. Developing Monitoring Questions

After setting the program objectives, and bearing in mind the issues to consider when monitoring, it is time to develop monitoring and evaluation questions. If these questions are well defined, they will facilitate the development of your M&E system. M&E questions should focus on each component of the program.

The major components of PMTCT programs that need to be monitored include:

1. Infrastructure
2. Confidentiality practices
3. Provision of services, including antenatal practices, coverage among women in the catchment area, HIV testing and counseling, infant feeding counseling, family planning counseling, outreach activities, and referrals
4. Human resources and capacity
5. Management and supervision, including an MIS and a patient tracking system

The questions you develop should also consider the inputs, outputs, and outcomes for each component.

3. Monitoring Indicators

Monitoring indicators are developed based on the objectives and monitoring questions created during program planning. Indicators are a necessary component of monitoring PMTCT programs. Without indicators, it becomes impossible to monitor program benchmarks.
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Monitoring Methods and Tools

Methods: Quantitative and Qualitative

Quantitative Monitoring

Quantitative monitoring (measuring how much, how many, quantity) tends to document numbers associated with the program, such as how many posters were distributed, how many counseling sessions were held, or how many times a promotional radio spot was aired. It focuses on which program elements are being carried out and how often. Quantitative monitoring tends to involve record-keeping and numerical counts. The activities in the project/program timeline of activities should be closely examined to see what kinds of monitoring activities might be used to assess progress. The method for monitoring and its associated activities should be integrated into the project timeline.

Qualitative Monitoring

Qualitative monitoring (quality) will ask questions about how well the elements are being carried out. Questions may include: how are people’s attitudes changing toward stigma, family planning, care and support; what is the influence of program activities on real or incipient behavior change; how information permeates communities “at-risk;” and so on. To obtain this type of information—which can also work as part of the feedback system—such qualitative methods as in-depth interviews and focus group discussions are often used.

Specific Monitoring and Evaluation Methods for PMTCT Programs

The following are some M&E methods commonly used to monitor and evaluate PMTCT programs:

- Reviewing records and reporting forms from clinics
- Physical site visits and walk-throughs to assess ANC area, VCT service and space, maternity services, laboratory, and supplies/pharmacy services
- Direct observation of interactions between clients and providers
- Qualitative methods such as focus group discussion and in-depth interviews with PMTCT site manager/coordinators, persons in charge of laboratory services, clients, and staff working in MCH clinics and maternity services

Monitoring and Evaluation Tools

The scope, content, and context of PMTCT interventions vary considerably between sites. Some sites provide “one-stop shopping” for all of the PMTCT-related services at the mother and child health (MCH)/antenatal care clinic; others provide counseling at the antenatal care clinic and testing at the laboratory, or at an existing VCT unit. Others may provide antenatal care, but not maternity services, and vice versa. Although there will be many common elements, tools need to be developed and adapted according to the situation and to respond to the needs of each program site.

Data Analysis and Use

1. Data Analysis

   Systematic analysis of the program data (i.e., outputs and outcomes) helps to identify major gaps in effectiveness and efficiency. For example, regularly assessing what proportion of women accept testing, initiate antiretroviral therapy, receive nutritional counseling, comply with antiretroviral therapy, and so on, can help you identify the major obstacles to effectiveness and act on them.
Also, for future expansion of the program, it is important to identify the successes and to analyze the reasons for successes.

Data analysis can take place at different levels.

At what levels can analysis occur?
- Analysis at the community level
- Analysis at the MCH level
- Analysis at the district level
- Analysis at the national level

What could be analyzed at the community level?
- Demand factors, such as reasons for non-use of antenatal care services
- Community awareness of the program
- Stigma

What could be analyzed at the MCH clinic level?
- Analysis of local progress
- Coverage
- Analysis of management issues
- Identification of obstacles

What could be analyzed at the district level?
- Analysis of cross-cutting issues
- Analysis of system support requirements (e.g., supervision and supply)
- Comparison of outputs and outcomes of different facilities
- Identification of best practices

What could be analyzed at the national level?
- Comparison of alternative strategies and policy decision-making

Measuring the indicators and plotting them on a graph makes it possible to visualize the degree to which the key conditions for effectiveness have been met and to identify the level at which the operational problems hampering implementation occur.

Evaluating PMTCT Programs

Evaluation answers the questions:

"What outcomes are observed? What do the outcomes mean? Does the program make a difference?"

Demonstrating benefits through core evaluation helps to verify whether:
- The intervention is successful in preventing MTCT
- The intervention reaches the intended beneficiaries
- The intervention benefits the targeted population
- The intervention harms the participants and/or nonparticipants living in the area
The minimum core evaluation process for PMTCT programs will involve the following:

1. Synthesizing local monitoring data from each clinic
2. Collecting and analyzing additional data that cannot be collected validly through the clinical and administrative management process (i.e., quality of counseling, client satisfaction, and assessment of client/provider interaction)
3. Assessment of impact on final outcomes of interest, mainly: HIV infection status of children, child mortality, social consequences of HIV testing (positive and negative), and social consequences of replacement feeding (risk of stigma)

Effectiveness of Intervention (Evaluation Questions)

- How much transmission is prevented by the use of ARV drugs in infants age 15 to 18 months?
- What effect did the infant feeding method have on HIV rates of infants age 15 to 18 months who were given ARV therapy?
- How much overall transmission is prevented through interventions offered by the program?
- What was the overall quality of VCT services?
- Is knowledge of HIV status associated with stigma, abandonment, and/or discrimination?
- Is knowledge of HIV status associated with positive changes in sexual behaviors, better access to medical, and social support?
- Is replacement feeding associated with stigma, abandonment, and/or discrimination?
- Is the program cost-effective?