

AFRICA CHILD SURVIVAL INITIATIVE
COMBATting CHILDHOOD COMMUNICABLE DISEASES
(ACSI-CCCD)

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**TRAINING MANUAL FOR PROGRAM
MANAGERS ON PROGRAM PLANNING FOR
MALARIA CONTROL**

MALARIA



UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT
Africa Regional Project (698-0421)



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Centers for Disease Control
and Prevention
International Health Program Office

CDC
CENTERS FOR DISEASE CONTROL
AND PREVENTION



A TRAINING MANUAL FOR PROGRAM MANAGERS ON PROGRAM PLANNING FOR MALARIA CONTROL

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BACKGROUND

The Africa Child Survival Initiative—Combatting Childhood Communicable Diseases (ACSI-CCCD) Project was established in 1981 by the United States Agency for International Development. Prime responsibility for project implementation was given to the Centers for Disease Control and Prevention (CDC), an agency of the United States Public Health Service. The goal of the CCCD project is to strengthen the capacities of sub-Saharan countries to prevent and control the priority causes of mortality, morbidity and disability, and to reduce infant and child mortality. Vaccine-preventable diseases, diarrheal diseases, malaria, and acute respiratory infections were selected as target diseases. CCCD has improved the delivery of health services for each of these diseases by providing assistance to African governments in health education, training and supervision, operations research, health information systems, and health financing.¹

Between 1981 and 1990, activities for the malaria component of the CCCD project focused on improving case management of patients by defining more precisely the epidemiology of malaria, by testing the effectiveness of recommended control measures, and by strengthening national leadership.² Since 1990, CCCD has increased its emphasis on the programmatic aspects of malaria control. In collaboration with the World Health Organization (WHO) and African ministries of health, CCCD has adopted a systematic approach to improve the management of malaria control programs. This approach consists of four phases: policy development, program planning, implementation, and evaluation. In each phase, training and technical assistance were provided to improve the national malaria control program managers' skills.

Intercountry workshops were an important method used during the policy and program planning phases. The first two-week workshop was titled "Policy Development for Malaria Control" and took place in Bobo-Dioulasso, Burkina Faso, from June 27 to July 10, 1991. The second two-week workshop, "Program Planning and Management for Malaria Control" was conducted in Abidjan, Côte d'Ivoire, from May 18 - 29, 1992. The workshops were attended by national malaria control program managers and other ministry of health personnel involved in malaria control, representing 21 francophone African countries.

The policy workshop was designed to improve program managers critical decision-making skills in formulating national malaria control policy through the use of epidemiologic and behavioral data. By the end of the workshop, participants developed draft policy guidelines for facility- and community-based case management and prevention of malaria for their countries. The program planning workshop was designed to improve the planning skills of program managers and to discuss program management issues. During the workshop, participants drafted a preliminary national malaria control program plan.

PURPOSE OF THE TRAINING MANUAL

The training manual, *Program Planning for Malaria Control*, is composed of seven lesson plans. These materials were developed by training specialists and malariologists from CDC, in collaboration with African program managers and WHO. They are based on the lesson plans used during the Abidjan workshop, and have been revised according to comments made from both training team members and workshop participants. What is presented in this manual reflects ideas for program managers, trainers, and international organizations for conducting future intercountry or national workshops on malaria control program planning. All materials need to be adapted based on the participating countries' needs and priorities.

USERS GUIDE

Design and Evaluation of the Workshop

The Users Guide consists of (1) workshop objectives, (2) a description of the lesson plans, (3) workshop preparation activities and a training schedule, and (4) workshop evaluation guidelines. The design of the training workshop is based on the principles of adult learning theory. This theory states that adults learn best when there is respect for what the learner already knows, when learners see how they can use their new knowledge and skills immediately, and when what they are learning is directly related to their own life experience.³

I. Objectives

The overall objectives for the Program Planning and Management workshop are for participants to –

- Identify malaria control program objectives and indicators.
- Identify activities and tasks to be implemented, and state how they will be conducted.
- Identify strategies for monitoring and evaluating the malaria control program.
- Develop draft components of a national malaria control program plan.

II. Lesson Plans

The training manual consists of seven lesson plans. Each lesson plan guides the trainer through an introduction to the subject, a demonstration of the skill(s) to be learned, opportunities for participants to practice new skills and receive feedback from colleagues and trainers, and an application of the skills to the country situation through practical exercises.

Each lesson plan requires a minimum of one day (8 hours) to conduct. The majority of the time is spent on application exercises, and discussion of planning decisions proposed by each country. Participants work in small groups and in country teams to complete the exercises, and discuss their results in plenary sessions.

There are two main sections to each lesson plan: (1) facilitator activities, and (2) learning aids. *Facilitator activities* are instructions to trainers designed to guide participants through a series of steps intended to take full advantage of the participants' experience in malaria control. The facilitator activities are structured in the following manner:

(A) Introduction to the subject

- Presentation of session objectives
- Introduction of new material
- Questions asked to participants about their previous experiences
- Discussion on the relevance of the subject

(B) Demonstration of skills to be learned

- Presentation of case study(ies) from one or more countries
- Questions and discussion of demonstration exercise to ensure participants' understanding of the subject

(C) Skill practice and feedback

- Exercises in small groups or in country teams
- Feedback from colleagues and trainers
- Presentation and discussion of group work

(D) Application of skills to country situation

- Discussion of practical management issues to program planning
- Exercise in small groups or country teams
- Presentation and discussion of country team work

(E) Summary of session

- Presentation of key points
- Questions, comparison of experiences, and discussion of application of skills learned
- Identification of issues to resolve

Learning aids are included for each lesson plan. They summarize technical information, provide sample responses to questions and examples of case studies from countries, and outline sample exercises to use for the "practice and feedback" and "application" sections. Learning aids do not reflect the entire content of the workshop. Instead, they introduce the trainer to possible responses by participants. Because of the interactive methods employed when conducting these workshops, the content of the lesson plans will draw heavily from participants' experiences. Most of the learning aids are presently not appropriate as handouts because they only reflect examples of participants' responses. Trainers need to decide if they will ask participants to take notes during the sessions, or if a designated note-taker will provide summary reports of each session. Data presented in this training manual were abstracted from various national surveys, and should be reviewed and updated before use in future workshops.

III. Preparation for the Workshop

Establish a timeline

Intercountry workshops take many months to prepare. Sufficient time must be built into the planning schedule to allow adaptation of the training materials. Follow-up activities and evaluation of the workshop must also be planned prior to its implementation. The following timetable provides an example of the steps organizers need to take. Several of these steps are explained in detail in the next pages.

Activity	Time frame
Organizers announce workshop	6-12 months prior to workshop
Identify and recruit participants	4-6 months prior to workshop
Identify and recruit trainers	4-6 months prior to workshop
Conduct assessment of participants' needs	3 months prior to workshop
Meet with selected trainers to develop or revise training materials based on needs assessment results, and to design workshop evaluation plan	1-week meeting, 2 months prior to workshop
Select training site and arrange logistics	2 to 3 months prior to workshop
Prepare and conduct pre-workshop planning meeting with workshop trainers	3 to 7 days immediately prior to workshop
Trainers finalize workshop materials	2 days prior to workshop
Conduct workshop	2 to 5 weeks
Monitor learning and accomplishments after the workshop through surveys and site visits	4 to 9 months after workshop (or as necessary on a periodic basis)

Select participants

Participants in the workshop should include national, regional, or district program managers for malaria control, or ministry of health personnel who make policy or planning decisions. They must be technically knowledgeable in malaria control programming issues. The exercises are designed to be conducted in teams; therefore, each country (region or district depending on the workshop's format) should be represented by two to three participants. Participants should be notified several months in advance and asked to bring current epidemiological and behavioral data on malaria control in their country, and any available national malaria policies and plans, to the workshop.

Select and train trainers

The workshop materials presented in this manual have been designed for use by malariologists and program management specialists. Trainers selected to facilitate the workshop should have prior experience in conducting workshops that use interactive teaching methods. It is also recommended that they have basic technical knowledge of malaria control in Africa. Prior to the workshop, trainers must be convened to familiarize themselves with the materials; to adapt the materials to the specific course objectives, participants, and cultural context; and to practice delivering the lesson plans. At least five days is suggested for the pre-workshop trainers meeting. Teams of two or more trainers are recommended to facilitate each session. All trainers are expected to assist country teams in developing their program plans during the workshop, and to support them by monitoring the continual development of these plans following the workshop.

Conduct a training needs assessment

Prior to conducting a workshop, the trainers and organizers should assess the participants' needs and priorities. Results from the needs assessment can be used to modify the lesson plans and the workshop schedule. Several methods are listed below.

1. **Pre-workshop questionnaire**

Purpose: To identify program managers' skills and priorities on planning and management topics

Procedures: A self-administered questionnaire is sent to prospective participants several months prior to the workshop. Participants are asked to rate their skills for several planning topics from good

to weak, and to prioritize areas on planning for future training. The frequency of responses is determined for each item, and the results are presented to trainers during their pre-workshop planning meeting. (A sample questionnaire is included in Appendix A.)

2. Interviews with program managers

Purpose: To discuss, in depth, program managers' priorities and concerns regarding program planning and management issues

Procedures: Site visits are conducted to prospective participants' countries (regions or districts). An interview protocol is prepared by the interviewer to guide the discussion. Results are summarized and presented to trainers during their pre-workshop planning meeting.

3. Review of existing national program plans

Purpose: To gain a better understanding of the strengths and weaknesses of existing national malaria control program plans.

Procedures: An independent reviewer assembles all existing program plans from prospective participants. Similarities and differences in layout and structure are determined, the overall quality of the plans is assessed, and the strengths and weaknesses of planning elements are identified. Results are summarized and presented to trainers during the pre-workshop meeting.

Draft a preliminary workshop schedule

Each lesson plan builds upon the material presented in the previous lesson plan and should be presented in the sequence provided. A minimum of two weeks is required to cover the lesson plans in this training manual. A sample schedule for a 2-week workshop is provided on the next page.

SAMPLE SCHEDULE FOR PROGRAM PLANNING AND MANAGEMENT WORKSHOP

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Opening						
Lesson plan 1	Lesson Plan 2	Lesson Plan 3	Lesson Plan 4	Lesson Plan 4 (continued)		
Lesson Plan 5	Lesson Plan 6	Lesson Plan 7	Lesson Plan 7 (continued)	Closing		

IV. Evaluation of the Workshop

The training process needs to be monitored throughout the workshop, and field application of skills and resulting outcomes need to be assessed after the workshop. Experience has shown that monitoring and evaluation are most beneficial when conducted in a constructive, positive, and nonintimidating manner. Several methods used to assess workshops are listed below. Results obtained through use of these methods are helpful in making practical mid-course modifications of the workshop, and in identifying possible barriers to the application of skills in the field. Evaluation methods should be adapted to each workshop situation, and trainers may want to omit or adapt selected methods to fit their own needs and specific workshop objectives. An evaluation team is needed to develop and implement the evaluation methods, and to assist in summarizing results. This team can be composed of several trainers.

A. Process Methods

1. Daily Curriculum Meetings

Purpose: To identify the strengths and weakness of each session, and to make final modifications in upcoming lesson plans.

Procedures: All facilitators meet at the close of each session (or day) to discuss the positive aspects of the session and the points that need to be improved. A summary of the next day's lesson plan is presented by the designated facilitator(s), and the training team discusses any outstanding issues on the content and methods to be used.

2. Large Group Participant Reaction Sessions

Purpose: To give all participants the opportunity to discuss the workshop's positive points, to identify areas for improvement, and to make recommendations for modifying the workshop.

Procedures: At the end of the second or third day of the workshop, all participants are requested to attend a 30- to 45-minute session. One workshop facilitator (the rest of the training team is absent to encourage objectivity of responses) presents three questions to the group: (1) What is helping you to learn during the workshop; i.e., positive aspects?

(2) What is hindering you from learning; i.e., negative aspects and problems? and (3) What recommendations can be made to address the problems? Responses to each question are written on flip chart paper by a participant acting as a note-taker, and a hand count of the number agreeing with the comment is taken. Results are presented to the training team by the note-taker at the end of the session.

This method can be repeated as needed during the workshop. A minimum of once during the first week, and once during the second week is recommended. Problems identified can be discussed in more depth during the focused group discussions(see below).

3. Focused Group Discussions

Purpose: To give participants the opportunity to discuss the content, relevance, logistics, etc., of the workshop in depth, and to make recommendations to the organizers on mid-course modifications.

Procedures: After the third or fourth day of training, a small group of participants (8 - 10) is selected to participate in a focused group discussion, either randomly or based on specific criteria agreed on by the training team (e.g., degree of participation during the sessions, professional position). This group discussion should be guided by one or two workshop facilitators using a protocol. (These facilitators should have previous experience in guiding focus groups.) A participant should act as note-taker and an additional facilitator can be an observer, if necessary. A tape recorder is recommended to ensure accuracy of participants' comments. One hour is suggested for the discussion and an additional hour to synthesize comments. Results from the focused group discussion should be presented first to the training team and then to all participants the following day by the note-taker.

4. Final Workshop Questionnaire

Purpose: To assess participants' reactions to workshop content, relevance, methods, and logistics.

Procedures: A self-administered questionnaire is completed by each participant on the next to last day of the workshop. Participants are asked to respond to a number of statements about the workshop, using a 5-point scale ranging from "strongly disagree" to "strongly agree". The frequency of responses is determined for each statement, and results are presented to participants on the final day of the workshop. A sample questionnaire is included in Appendix B.

B. Assessment of Field Applications and Outcomes

1. Objective Review of Program Plans

Purpose: To assess changes in program plans from before to after the workshop.

Procedures: An independent reviewer examines the major components of the national malaria program plan for each country at three points in time: before the workshop, at the close of the workshop, and six to nine months after the workshop once the national program plan has been revised. Important results are shared with all participants. For example, a review of the components of participants' pre- and close-of-workshop national program plans found that before the Abidjan workshop only 8 malaria program plans from among the 17 participating countries included indicators for tracking program progress; by the close of the workshop, all 17 had included such indicators.

2. Progress Assessment during Site Visits to Countries

Purpose: To identify problems encountered by workshop participants and other ministry of health personnel in completing the national program plans, in gaining consensus with decision makers, and in seeking approval of the plan by the ministry and other collaborators.

Procedures: On-site reviews of the program plan are conducted with workshop participants and discussions of obstacles encountered are held. (Note: Site visits vary greatly among countries. Visits conducted by trainers four to seven months after the Abidjan program planning workshop found that a minimum of one week is required to review the main points of the workshop, and to discuss the program plan with key decision makers in the ministry of health.)

3. Post-workshop Questionnaire

Purpose: To monitor actions taken after the workshop by participants, and to identify barriers to the program planning process and gaining plan approval by the ministry of health.

Procedures: Six months after the workshop, a self-administered questionnaire is sent to all participating countries. Participants are asked to report on the status of their program plan and to identify any problems. Results are summarized and presented to all participants. This questionnaire can be repeated periodically. A sample questionnaire is included in Appendix C. Results of a post-Abidjan workshop survey sent in February 1993 to 15 of the participating countries found that 11 had drafted a new plan based on their work during the Abidjan workshop, and seven countries have submitted the plan for approval by the ministry of health.

LESSON PLAN 1

THE TRANSITION FROM POLICY TO PROGRAM PLANNING

- OBJECTIVES:** By the end of the session, participants will be able to –
1. Discuss the four major steps in malaria control programming.
 2. Identify components of a program plan.
 3. Identify the essential components of planning that will be addressed during the workshop.

METHODS: Lecture, discussion

MATERIALS: Learning aids, flip chart paper, transparencies, markers

TIME: 3 hours

FACILITATOR ACTIVITIES:

NOTE: This lesson plan does not follow the standard format. Instead, it introduces what is to be covered during the workshop.

1. Welcome participants to the workshop. Explain the working norms and any logistical and administrative issues.
2. Present the objectives for the session (title page).
3. Ask how many participants took part in the workshop on policy development for malaria control in Africa. Explain that this workshop -- program planning and management -- builds on the program development process begun during the policy workshop.
4. Ask participants who participated in the policy development workshop to summarize the major points of the workshop.

Learning Aid #1

5. Explain to participants that program planning must be based on prior policy decisions; i.e., objectives and activities must be compatible with the policy goal of reducing mortality and morbidity, and the priority interventions of improving case management in health services and in the community (a small number of sub-Saharan African countries may be starting to improve prevention interventions at the same time as improving case management).
6. Show participants the four steps in malaria control programming. Explain to participants that good planning -- the second step in the process -- not only responds to policy directives, but also guides program implementation and evaluation.

Learning Aid #2

7. Explain to participants that program planning is taught by many organizations and in many different ways. Explain that it is more important for each country to develop a plan that is useful than to follow a standard format.
8. Ask participants to identify the common components in their program plans.

Learning Aid #3

Compare the similarities and differences among countries.

9. Explain to participants that all of these components are important, but that this workshop will limit itself to those components thought to be most critical for planning.
10. Identify the planning components that will be addressed during this workshop.

Learning Aid #4

11. Explain that by the end of the workshop, each country will have had the opportunity to develop a preliminary plan that addresses each of these areas.

Explain that this preliminary plan can be used to develop or revise the national malaria control program plan upon return to their countries.
12. Ask participants if there are any questions or comments before moving on to the next session on impact objectives.
13. Review the accomplishment of the session's learning objectives (title page).

Learning Aids

Learning Aid #1 Major points of the policy development workshop

- Most countries chose, as goals for their malaria control programs, to reduce mortality and morbidity due to malaria.
- The primary intervention chosen was case management in health facilities and/or in the community.
- Case management guidelines were established for noncomplicated malaria, therapeutic failures, and severe malaria.
- Issues of prevention were discussed regarding chemoprophylaxis, personal protection, and vector control.

Learning Aid #2 Steps in malaria control programming

1. Develop a policy.
2. Develop a program plan.
3. Implement the program plan.
4. Monitor and evaluate the program.

Learning Aid #3

Common components in malaria control plans

- Analysis of the situation (epidemiologic, geographic, socio-cultural, economic, political, etc.)
- Historical background of the program
- Organization of the program
- Intersectorial coordination with other programs
- Program objectives
- Program activities
- Budget
- Timetable for program activities
- Monitoring and evaluation plan

Lesson Plan 1: Policy to Planning

Learning Aid #4

The planning process that will be addressed during the workshop

1. Impact objectives and indicators
2. Outcome objectives and indicators
3. Implementation plan (includes activities, tasks, methods, person(s) responsible, budget, timetable)
4. Monitoring plan
5. Evaluation plan

LESSON PLAN 2

IMPACT OBJECTIVES AND INDICATORS FOR A NATIONAL MALARIA CONTROL PROGRAM

- OBJECTIVES:** By the end of the session, participants will be able to –
1. State at least three reasons for establishing impact objectives.
 2. State several difficulties in establishing impact objectives.
 3. Draft an impact objective(s) for their country.
 4. Define an indicator.
 5. Describe the characteristics of a good indicator.
 6. Draft indicators to measure the impact objective(s) for their country.
- METHODS:** Lecture, discussion, demonstration, small group exercises
- MATERIAL:** Learning aids, markers, flip chart paper
- TIME:** 7 hours

Lesson Plan 2: Impact Objectives and Indicators

FACILITATOR ACTIVITIES:

Introduction (time: 45 minutes)

1. Show participants the components of the planning process and where we are in the process.

Learning Aid #1

2. Present the learning objectives for the session (title page).
3. Explain that during the workshop on policy development in Africa, the majority of program managers selected a reduction in malaria-related mortality and morbidity as the goal of their malaria control programs.
4. Explain that once a goal has been set, the next step is to develop objectives to meet this goal. Explain that objectives that indicate how the program will impact upon the health status of the population are often called "impact objectives."

Ask participants if they have developed impact objectives for either their malaria control program or other public health programs.

5. Ask participants to provide examples of their current impact objectives. Write several examples of impact objectives on a flip chart. Explain that these objectives might be labeled "long-term" objectives or "general" objectives in their current plans.

Remind participants that they are looking for objectives that describe the extent to which malaria-related mortality or morbidity will be reduced.

6. Ask participants to state why it is important to set impact objectives.

Learning Aid #2

7. Ask participants to cite any problems or constraints they may have encountered in setting these objectives.

Learning Aid #3

8. Explain to participants that use of a format can help them write good objectives. Ask participants if they are familiar with how an objective should be written. Provide participants with a suggested format for writing objectives.

Learning Aid #4

Demonstration (time: 1 hour, 15 minutes)

1. Explain that setting an impact objective(s) can be useful but very difficult. Explain that the purpose of this demonstration is to discuss the issues to consider when setting impact objectives, and to provide examples of several well-written impact objectives.
2. Review again the list of impact objectives that participants provided earlier in step 5 of the introduction to this lesson. Choose several objectives related to mortality and several to morbidity. Identify their -
 - Common points (reduction, expressed in %, during a specific time interval)
 - Differences (mortality or morbidity, place, target population, etc.)

Note how these objectives follow the agreed-upon format for writing objectives identified in step 8 of the introduction.

3. Ask participants to describe the criteria they used when they developed these objectives.

Lesson Plan 2: Impact Objectives and Indicators

4. Ask participants to state several criteria that should be considered when developing impact objectives.

Learning Aid #5

5. Explain to participants why it is important to set targets.

Learning Aid #6

6. Provide examples of well-written impact objectives.

Learning Aid #7

Ask participants to discuss if these objectives are appropriate for their countries. Ask them to identify how they would need to modify the objectives for their country.

1. Explain that the purpose of the practice and feedback exercise is to give participants the opportunity to practice developing an impact objective.

2. Explain the task.

Learning Aid #8

3. Divide the participants into their country teams. If possible, have countries with similar epidemiologic conditions sit near one another.

4. Facilitators assigned to each country team should do the following:
 - Review the task.
 - Inform participants of the time allotted for the exercise.
 - Arrange for the selection of a timekeeper and a note-taker.
 - Remain with designated team throughout the exercise and provide feedback when necessary.

5. At the end of the exercise, reconvene the participants and –
 - Ask a representative from selected country teams to present their group's impact objectives. Have the representative describe how and why the objectives were chosen.
 - Encourage the participants to comment on the similarities and differences among the impact objectives developed by the different countries.
 - Ask participants who have had experience setting objectives in other programs how that experience has influenced them in the development of these impact objectives, and whether it is pertinent to consider impact objectives from other programs when developing impact objectives for malaria.

1. Explain that the purpose of the application exercise is to give participants the opportunity to discuss the management challenge of measuring progress toward the attainment of the impact objective(s).

2. Ask participants to give examples of how they could measure progress toward the attainment of impact objectives.

Lesson Plan 2: Impact Objectives and Indicators

3. Explain that indicators have been used in other programs such as EPI (Expanded Program on Immunization) and CDD (Control of Diarrheal Disease) to evaluate the attainment of program objectives. Ask participants to define an indicator.

Learning Aid #9

Explain that in impact indicators, the numerator refers to mortality or morbidity, and the denominator reflects the population at risk (general population or target population, hospitalized patients or communities, total number of deceased or ill, etc.).

4. Ask participants to state why indicators are important to program managers. Explain that tracking of indicators over time can reveal trends associated with program interventions.
5. Ask participants to identify the characteristics of a good indicator.

Learning Aid #10

6. Ask participants to make a list of potential indicators to measure the progress toward the following objective:

In the next 8 years, reduce by 25% malaria-related mortality in children under 5.

List the responses and provide additional ones if necessary.

Learning Aid #11

7. Ask participants to identify the advantages and disadvantages of each indicator.

Learning Aid #12

8. Ask participants to make a list of potential indicators to measure progress toward the following objective:

In the next 10 years, reduce by 25% malaria-related morbidity in children under 5.

List the responses and provide additional ones, if necessary.

Learning Aid #13

9. Ask participants to identify the advantages and disadvantages of each indicator.

Learning Aid #14

10. Explain to participants that there will be an exercise on the development of indicators that will be conducted in their "country teams." Describe the task.

Learning Aid #15

11. Divide participants into their country teams.

12. Facilitators assigned to each of the groups should do the following:

- Review the task.
- Inform participants of the time allotted for the exercise.
- Arrange for the selection of a timekeeper and a note-taker.
- Remain with designated team throughout the exercise and provide feedback when necessary.

Lesson Plan 2: Impact Objectives and Indicators

13. At the end of the exercise, reconvene the participants and –
 - Ask a representative from selected groups to present two indicators chosen to measure their impact objective.
 - Encourage participants to comment on the similarities and the differences among different countries.
 - Ask participants if they feel their countries' indicators meet the established criteria.
 - Discuss the difficulties in collecting indicator data and introduce the notion of efficiency through integration of health information systems among programs.

14. Tell participants that they will have the opportunity to discuss how they will use indicators to evaluate their programs during the session on developing an evaluation plan.

Synthesis/Summary (time: 30 minutes)

1. Ask participants to summarize the major points of the session.

Learning Aid #16

2. Ask participants to comment on the relevance of the session and the possibility of applying what they have just learned upon return to their countries.
3. Ask participants to post their impact objectives and indicators on the conference room wall.
4. Review the accomplishment of the session's learning objectives (title page).
5. Explain to participants that another type of objective, called outcome objectives, can be measured more easily than impact objectives. These objectives and indicators will be addressed in the next session.

Learning Aids

Learning Aid #1 Components of the planning process and where we are

1. **Impact objectives and indicators – *We are here***
2. Outcome objectives and indicators
3. Implementation plan (activities, tasks, methods, person(s) responsible, budget, timetable)
4. Monitoring plan
5. Evaluation plan

Learning Aid #2 Reasons for setting impact objectives

- Impact objectives state the changes in health status that should result from the program, thus motivating program personnel and justifying program support.
- Impact objectives state these changes in quantitative terms, and establish a timeframe for their achievement, thus providing a yardstick against which the progress of the program can be measured.
- Impact objectives provide the basis for making decisions about important intermediate or short-term outcome objectives.

Learning Aid #3 Constraints to setting impact objectives

- Lack of microscopy and of a sensitive and specific case definition for malaria make it difficult to accurately monitor the number of cases of malaria.
- Most malaria occurs in the community without being reported to health authorities, thus compounding the difficulty in monitoring malaria cases and deaths.
- Impact objectives can be difficult, costly, and time consuming to measure.

Learning Aid #4 **Format for writing objectives**

A well-written objective should include the following:

- The time frame within which the target is to be met
- The action that will occur
- The magnitude of change anticipated (target)
- To whom and where the action will occur (target population, area, etc.)

Example: By 1999, reduce by 25% malaria-related mortality in children under 5.

Learning Aid #5 **Criteria to consider when developing objectives**

- Measurable
- Realistic
- Limited in time
- Comprehensive (i.e., the set of objectives should cover the major aspects of the program)

Learning Aid #6 Establishing targets for objectives

A target is important because –

- It provides a measurable estimation of the objective to be attained, and gives an idea of the effort and resources that must be invested.
- The degree to which the objective has been attained, or the speed of progress towards that objective, provides program planners with information necessary to revise the objective.

Learning Aid #7 Examples of impact objectives

Mortality

By 1998, reduce by 30% malaria-related mortality in children under 5.

By 1998, reduce by 50% hospital fatality rates due to malaria in children under 5.

Morbidity

By 1998, reduce by 30% malaria-related morbidity in children under 5.

By 1998, reduce by 50% malaria-related morbidity in pregnant women who visit prenatal clinics.

Learning Aid #8

Practice and feedback exercise

In your country teams:

1. Identify the impact objectives in your current malaria control program plan. Remember that these objectives are concerned with reductions in mortality and morbidity due to malaria, and that they are sometimes called "general" or "long-term" objectives.
2. Discuss how your program set these objectives; i.e., what information was used to establish target's %, target populations, and time-frames? Are you satisfied with the process used to set these current impact objectives? Why or why not?
3. Discuss the status of these objectives -- were they attained, revised, or are they currently being re-evaluated?
4. Discuss the usefulness of your impact objectives for your country's malaria control program. Are there ways of improving these objectives?
5. Revise, if necessary, your country's impact objectives. Explain the reasons why you revised them (or did not revise them).
6. Once you have discussed these issues, share your impact objectives with at least one other country group (preferably with a country that has similar malaria-related epidemiology).
7. Be prepared to present your objectives to the large group.

Learning Aid #9 **Definition of an indicator**

- A quantifiable measurement that can be repeated over time to track progress toward the attainment of objectives.
- Indicators are usually composed of a numerator and a denominator. They directly or indirectly measure changes in the health situation or in program outcomes, and help to show the degree to which the objectives were attained.

Learning Aid #10 **Characteristics of a good indicator**

- Reflects the objectives of the program
- Sensitive: able to detect change resulting from program activities within a reasonable time period
- Valid: correctly reflects the actual situation
- Reliable: the obtained measures are the same if repeated by different people
- Able to be interpreted
- Practical: measurable with the available resources of the program
- Useful: results can be analyzed by staff and used to improve the program.

Learning Aid #11 Examples of mortality indicators

1. During a one-year period, the number of deaths in children under 5 following a malaria-like illness in health facilities.
2. During a one-year period, the proportion of deaths in children under 5 seen in health facilities for a malaria-like illness.
3. The proportion of all deaths in children under 5 seen in referral health facilities that occur in children with microscopically-confirmed malaria.
4. The proportion of all deaths in children under 5 for a malaria-like illness.
5. The proportion of children under 5 who die in the hospital following hospitalization for a malaria-like illness.
6. During a one-year period, the proportion of malaria-related deaths among deaths in children under 5.

Learning Aid #12 Advantages and disadvantages of mortality indicators

Advantages

#1, #2, and #3 depend on health facility information that is often collected on a routine basis (practical).

#3 is more valid than others because the diagnosis is confirmed microscopically.

Disadvantages

#1, #2, and #3 include only health facility data, which usually represent only a minority of malaria-related deaths (less valid).

#4 and #6 demand a denominator of the population with access to health facilities, or the entire population. In many sub-Saharan African countries, population estimates are unavailable or outdated, and utilization rates for health facilities may vary over time.

#2, #3, #4, #5 and #6 may be difficult to interpret because the denominator is influenced by changes in health service use or non-malaria morbidity.

Learning Aid #13 Examples of morbidity indicators

1. The number of children under 5 diagnosed with malaria at health facilities
2. The proportion of children under 5 presenting at health facilities who are diagnosed with malaria
3. The proportion of children under 5 seen in referral health facilities who have microscopically-confirmed severe malaria

Learning Aid #14 Advantages and disadvantages of morbidity indicators

Advantages

#1 and #2 depend on health facility information that is often collected on a routine basis (practical).

#2 and #3 provide estimates of the share taken by malaria and its complications in the spectrum of illness seen at health facilities, thus helping in the planning of health delivery (useful).

Disadvantages

#1 and #2 will include children who might or might not have malaria if the diagnosis is not microscopically confirmed.

#2 and #3 may be difficult to interpret because the denominator is influenced by changes in health service use or non-malaria morbidity.

All are at the level of health facilities, which see only a minority of children suffering from malaria, and where attendance can fluctuate.

Learning Aid #15

Application exercise on indicators

In your country teams, complete the following steps:

1. Review the different impact indicators that are written in your current program plan. If your plan does not include indicators, skip to step 4 and begin developing appropriate indicators for the impact objectives you developed in the first part of this session.
2. Discuss how these indicators were chosen.
 - Do they reflect the objectives of the program?
 - Do they present measurable variations due to program activities?
 - Are they valid?
 - Are they reliable?
 - Are they able to be interpreted?
 - Are they practical?
 - Are they useful?
3. Discuss your experience in using these indicators to measure impact objectives.
4. Revise the indicators, as necessary.
5. Share your indicators with another country team. Discuss similarities and differences.
6. Be prepared to present your work in a plenary session or group.

Learning Aid #16

Key points of the session

1. The development of impact objectives is an important step in the planning process.
2. Impact objectives measure changes in health status, such as mortality and morbidity reduction.
3. For malaria, setting the quantitative target value for an impact objective is difficult.
4. Indicators are quantified measurements that track progress toward the attainment of objectives.

LESSON PLAN 3

OUTCOME OBJECTIVES AND INDICATORS FOR A NATIONAL MALARIA CONTROL PROGRAM

- OBJECTIVES:** By the end of the session, participants will be able to –
1. Describe the difference between an impact objective and an outcome objective.
 2. List two reasons why it is important to set outcome objectives.
 3. Describe the characteristics of a good outcome objective.
 4. Formulate at least four outcome objectives.
 5. Draft appropriate indicators to measure progress toward the attainment of outcome objectives.
- METHODS:** Lecture/discussion, demonstration, small group exercises
- MATERIAL:** Learning aids, markers, flip chart paper
- TIME:** 7 hours

FACILITATOR ACTIVITIES:

Introduction (time: 1 hour)

1. Show participants where we are in the planning process.

Learning Aid #1

2. Present the learning objectives for the session (title page).
3. Compare impact objectives and outcome objectives. Define each type of objective.

Learning Aid #2

4. Ask participants to discuss the usefulness of outcome objectives.

Learning Aid #3

5. Explain to participants that case management of patients is the priority intervention in most countries in sub-Saharan Africa because it represents the most direct and feasible approach to reducing malaria mortality and morbidity.

Explain to participants that case management is a complex process that involves health providers correctly diagnosing, treating, educating, and referring patients; facilities having available drugs and supplies; and caretakers providing appropriate home care.

6. Ask participants to identify the different types of outcome objectives. Show a diagram of three levels of outcomes for case management.

Learning Aid #4

Demonstration (time: 1 hour)

1. Explain to participants that we will now demonstrate how to write objectives for three levels of intended outcomes of case management.
2. Review with participants the characteristics of a good objective.

Learning Aid #5

3. Assist participants in defining several objectives for each of the outcomes. Write their examples on flip-chart paper or on a transparency.

Learning Aid #6

4. Ask participants if these objectives are appropriate for their countries. Review each objective using the criteria and ask participants to identify how they would revise their objectives.

1. Explain that the purpose of the practice and feedback exercise is to give participants the opportunity to practice developing outcome objectives for their country.
2. Explain the task.

Learning Aid #7

Lesson Plan 3: Outcome Objectives and Indicators

3. Divide participants into their country teams.

4. Facilitators assigned to country teams should do the following:
 - Review the task.
 - Inform participants of the time allotted for the exercise.
 - Arrange for the selection of a timekeeper and a note-taker.
 - Remain with designated team throughout the exercise and provide feedback when necessary.

5. At the end of the exercise, reconvene the participants and –
 - Ask a representative from selected teams to present examples of their objectives for each of the four types of outcomes. Have the representative describe how the objectives were chosen.

 - Ask participants to review the objectives presented by the groups using the criteria for a good objective (LA# 5) identified earlier in the session.

6. Explain to participants that objectives can be developed for additional outcomes (e.g., pregnant women, families, communities, prevention activities) and can be broken down for the different levels of the health care system (e.g., national, regional, district, and local levels). Remind participants that this list of objectives needs to be limited to what the program can accomplish given current levels of resources.

Explain that objectives need to be reviewed and revised periodically to reflect a country's changing priorities.

Application (time: 2 hours)

1. Explain that the purpose of this part of the session is to give the participants the opportunity to look at the management challenge of measuring progress toward the attainment of outcome objectives.

2. Review with participants the definition of an indicator.

Learning Aid #8

3. Review with participants the characteristics of a good indicator.

Learning Aid #9

4. For one of the outcome objectives stated earlier in the session, ask participants to formulate several appropriate indicators.

Learning Aid #10

Explain that it is possible to have several imperfect indicators for one objective that, together, provide useful data for measuring program outcomes.

5. Explain to participants that there will be an exercise developing indicators for outcome objectives that will be conducted in their country teams.

Describe the task.

Learning Aid #11

6. Divide the participants into their country teams again.

Lesson Plan 3: Outcome Objectives and Indicators

7. Facilitators assigned to each of the country teams should do the following:
 - Review the task
 - Inform participants of the time allotted for the exercise
 - Arrange for the selection of a timekeeper and a note-taker
 - Remain with your designated team throughout the exercise and provide feedback when necessary

8. At the end of the exercise, reconvene the participants and –
 - Ask a representative from one of the country groups to present their indicators selected for case management of patients. Ask participants to comment on the similarities and differences between those presented and the indicators developed in their respective country teams.

 - Have representatives from different groups present their indicators for the objectives on health worker performance, facility resources, and behaviors of mothers/caretakers. Ask participants to review these indicators using the criteria identified earlier in the session for a good indicator (LA#9).

9. Ask participants if they think they have had sufficient information and practice on formulating appropriate indicators for outcome objectives, and if they will be able to continue developing them for their program plan upon return to their countries.

Synthesis/Summary (time: 15 minutes)

1. Ask participants to summarize the major points of this session.

Learning Aid #12

2. Ask participants to comment on the relevance of the session and how they will apply what they have just learned upon return to their countries.
3. Ask participants to post their country's outcome objectives and indicators on the conference room wall.
4. Review the accomplishment of the session's learning objectives (title page).

Learning Aids

Learning Aid #1 Components of the planning process and where we are

1. Impact objectives and indicators
2. **Outcome objectives and indicators – *We are here***
3. Implementation plan
4. Monitoring plan
5. Evaluation plan

Learning Aid #2 Definitions of impact and outcome objectives

Impact objective

Specifies a quantified change or target level of *health status* that will be achieved as a result of program activities. Should correspond to the priority goal of the program (e.g., mortality and morbidity reduction) as stated in the national policy and the priority target population (e.g. children under 5).

Outcome objective

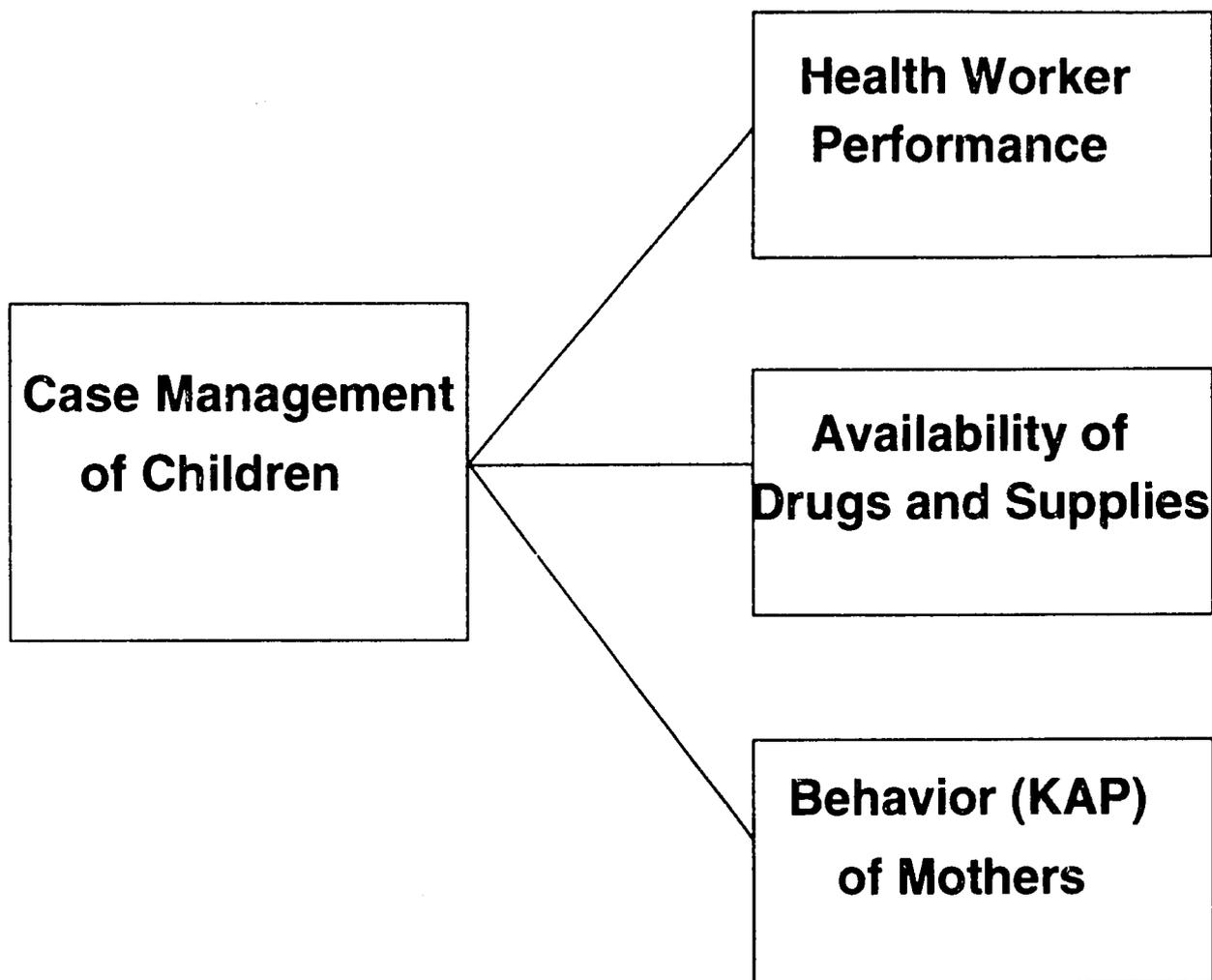
Specifies a quantifiable change or target level of health worker performance, behaviors of mothers, and availability of services and commodities. Should correspond to the priority intervention (e.g., case management or prevention), priority target population (e.g., children under 5), and those charged with the care of the target population (e.g., health care workers, mothers, family members).

Learning Aid #3

The usefulness of outcome objectives

- Outcome objectives help establish priorities for program management. They are needed for –
 - Planning activities
 - Determining required resources
 - Providing information on progress made toward the attainment of the program's impact objectives
 - Alerting managers to the need for changes in program direction or activities

- Outcome objectives may be easier to measure than impact objectives because their results are more attributable to program activities and measured more rapidly.



Learning Aid #5

Characteristics of a good objective

- Formatted correctly: Includes the action to be taken, the problem/solution, where or to whom the action will occur, the amount of change or target level, and a time frame within which the target is to be met
- Measurable
- Realistic
- Limited in time
- Comprehensive (i.e., objectives cover the major aspects of the program)

Learning Aid #6

Examples of outcome objectives for malaria control

Case management of children

By 1997, 80% of children under 5 with fever will receive malaria treatment in accordance with national policy.

By 1997, 90% of children under 5 diagnosed with malaria in a health facility will receive treatment in accordance with national policy.

Health worker performance

By 1997, 85% of health agents will prescribe or administer treatment in accordance with national policy to children under 5 diagnosed with malaria in health facilities.

By 1997, 90% of health agents will explain to mothers of children under 5 diagnosed with malaria in health facilities how to complete the 3-day treatment of chloroquine at home.

Facility resources

By 1997, 95% of health facilities will have adequate chloroquine and sulfadoxine-pyrimethamine in stock.

By 1997, 90% of major hospitals will have a microscope available.

Behavior of mothers/caretakers

By 1997, 90% of mothers of children under 5 with fevers will bring the child to a health facility within 24 hours of fever onset.

By 1997, 90% of mothers of children treated for malaria in a health facility will return within 48 hours of the onset of signs of complications.

Learning Aid #7

Practice and feedback exercise

In your country teams, complete the following steps:

1. Identify outcome objectives written in your current malaria control plan that address the following:
 - Case management
 - Health worker performance
 - Availability of essential drugs and supplies
 - Knowledge, attitudes and behaviors of mothers/caretakers

If your current plan does not specify outcome objectives, draft new ones for each of the four levels listed above, then proceed to step 4.

2. Decide if these outcome objectives meet the criteria for a good objective.
3. Revise, if necessary, the outcome objectives and explain why they were/were not revised.
4. Be prepared to present your work in a plenary group.

Learning Aid #8 **Definition of an indicator**

- A quantifiable measurement that can be repeated over time to track progress toward the attainment of objectives.
- Indicators are usually composed of a numerator and a denominator. They directly or indirectly measure changes in the health situation or in program outcomes, and help to show the degree to which the objectives were attained.

Learning Aid #9 **Characteristics of a good indicator**

1. Reflects the objectives of the program
2. Sensitive: able to detect change resulting from program activities within a reasonable time period
3. Valid: correctly reflects the actual situation
4. Reliable: the obtained measures are the same if repeated at different intervals or by different people
5. Able to be interpreted
6. Practical: one must be able to measure with the available resources of the program
7. Useful: results can be analyzed by staff and used to improve the program

Learning Aid #10

Examples of indicators

Case management of children

Proportion of children diagnosed with malaria who are administered antimalarial drugs in accordance with national policy.

Among children admitted to a hospital, the proportion diagnosed with severe malaria who are given the appropriate treatment in a hospital.

Health worker performance

Proportion of health workers who diagnose patients in accordance with national policy guidelines.

Proportion of health workers who administer or prescribe treatment for patients diagnosed with malaria in accordance with national policy guidelines.

Proportion of health workers who provide an accurate explanation of the treatment regimen to those diagnosed with malaria or their caretakers.

Proportion of health workers who refer patients in accordance with national policy guidelines.

Use of these indicators require that guidelines for judging "correct" performance be specified in advance. For example, how many of all the tasks involved in assessing and treating a child must be performed correctly to justify a judgment of "correct" performance?

Lesson Plan 3: Outcome Objectives and Indicators

Facility resources

Proportion of facilities in which providers can produce a written copy of the national policy guidelines for the case management of malaria.

Proportion of health facilities having at least one thermometer in working order.

Proportion of facilities where microscopic confirmation of malaria is possible within two hours of request.

Proportion of facilities reporting that stocks of antimalarial drugs present in the clinic during the past three months were sufficient to treat all patients appropriately during that time period.

Behavior of mothers and caretakers

Proportion of caretakers who state that fever in a child requires prompt treatment.

Proportion of children with fever seen in health facilities whose caretakers report that the child was treated at home or taken to a health facility within 24 hours of fever onset.

Proportion of caretakers of children seen for fever in a health facility in the past two weeks who report that the child completed the nationally recommended course of treatment.

Learning Aid #11

Application exercise on indicators

In country teams, complete the following steps:

1. Review your outcome objectives developed during the practice and feedback exercise.
2. Write at least one indicator appropriate for your program to measure progress toward each objective (be sure to cover objectives for case management of patients, health worker performance, facility resources, and behavior of mothers).
3. Discuss whether these indicators meet the following criteria:
 - Reflects the objectives of the program.
 - Sensitive: will present measurable variations due to the activities of the program during a fixed time period.
 - Valid: correctly reflects the actual situation.
 - Reliable: the obtained measures are the same if repeated by different people.
 - Able to be interpreted.
 - Practical: one must be able to measure with the available resources of the program.
 - Useful: results on indicator levels can be analyzed by staff and used to improve the program.
4. Be prepared to present your work in the plenary session.

Lesson Plan 3: Outcome Objectives and Indicators

Learning Aid #12

Key points of the session

- Outcome objectives are easier to measure than impact objectives and are more directly attributable to program activities.
- Program outcomes correspond to the interventions for the malaria control program – case management of febrile children and prevention of illness.
- Case management outcomes can be developed for health worker performance, facility resources, and behaviors of mothers/caretakers.
- Indicators should be drafted to measure attainment of outcome objectives.

LESSON PLAN 4

DEVELOPMENT OF AN IMPLEMENTATION PLAN

- OBJECTIVES:** By the end of the session, participants will be able to –
1. Explain the importance of an implementation plan.
 2. Identify the activities for program implementation that are necessary to achieve the specific set of outcome objectives.
 3. Identify the appropriate tasks for selected activities.
 4. For each of the tasks, identify the following:
 - Persons responsible
 - A timetable
 - The place
 - The methods
 - The cost
 - The source of financing
 5. Develop an implementation worksheet for each activity listing the tasks and the corresponding components.
 6. Refine a selected country's implementation plan based on data collected on the delivery of health services.
- METHODS:** Discussion/lecture, demonstrations, small group exercises, field trip
- MATERIALS:** Markers, flip chart paper, calculator, learning aids
- TIME:** Two days

FACILITATOR ACTIVITIES:

Introduction (time: 45 minutes)

1. Indicate to the participants where we are in the planning process.

Learning Aid #1

2. Present the objectives of the session (title page).
3. Explain to the participants that an implementation plan describes the activities and tasks necessary to achieve the outcome objectives of the program.
4. Define the following terms:
 - Activities
 - Tasks
 - Implementation Plan

Learning Aid #2

5. Ask the participants to describe the importance of an implementation plan for malaria control programs.

Learning Aid #3

Demonstration (time: 1 hour, 15 minutes)

1. Ask participants to think about the different types of questions that a program manager should ask about the implementation of a given activity. Write the participants' answers on a flip chart.

Learning Aid #4

Explain to participants that these questions should be asked about each major program activity and that it is possible to record all of the answers to these questions for each activity on a worksheet.

The compilation of these different activity worksheets forms the basis of the "implementation plan."

2. Present the implementation worksheet and review its different components. Ask participants to identify the column in the table that corresponds to each of the questions they identified in step 1. Encourage questions and comments.

Learning Aids #5 & #6

3. Present an example of a partially completed implementation worksheet for training activities in Togo. Show examples of two tasks.

Discuss with participants how each column of the implementation worksheet was completed for the two tasks. Describe how the calculations were performed.

Learning Aids #7 & #8

Ask participants to identify three additional training tasks and to provide the information necessary to complete the worksheet. Ask participants to justify their responses.

Lesson Plan 4: Implementation Plan

4. Encourage questions and comments before proceeding to the practice and feedback exercise.

Practice and Feedback (time: 2 hours)

1. Explain that the purpose of this exercise is to allow each country to complete an implementation worksheet for one activity that is currently a priority concern of their ministry of health.
2. Divide the participants into their country teams. Ask each team to select a priority activity. Record the name of each country and its respective activities on flip-chart paper. Ensure complete coverage of five major program activities.

Activity I.	Health information system (epidemiologic and administrative data, and operational research).
Activity II.	Health education
Activity III.	Training
Activity IV.	Supervision
Activity V.	Essential drugs and supplies

3. Distribute the blank implementation plan worksheets. Ask each country team to complete a worksheet for the activity they have selected by –
 - a. Listing the tasks (in chronological order, quantifying the information whenever possible. For example, develop 3 training modules, train 25 health workers).
 - b. For each task, determine the following:
 - Who will be responsible.
 - When the task will be completed (dates/time table)
 - The site of implementation (place)
 - By what mechanisms (methods) the activity will be implemented
 - Approximate cost of implementation
 - Source of financing

Learning Aid #9

4. Facilitators assigned to each country team should do the following:
 - Review the task.
 - Inform participants of the time allotted for the exercise.
 - Arrange for the selection of a timekeeper and a note-taker.
 - Remain with designated team throughout the exercise and provide feedback when necessary.
5. Once the country team work has been completed, report the results in plenary session.
 - a. For each of the activities, select one country to present its implementation worksheet.
 - b. Ask participants to comment on the different components of the implementation worksheets.
6. Ask participants to display their implementation worksheets in the conference hall.

Lesson Plan 4: Implementation Plan

7. Explain to participants that the implementation worksheets for each of the program activities must be put into an "implementation plan" that describes the full range of activities planned to achieve the outcome objectives.
8. Summarize the exercise and encourage questions and comments before proceeding to the Application exercise.

Application Field trip (time: 8 - 9 hours)

1. Explain to the participants that implementation plans are often developed by a small group of planners sitting together in an office in the capital city. Unfortunately, planning does not always take into account the field realities and the needs of the "implementors." Explain that data on the adequacy and effectiveness of current health services can be used to refine an implementation plan and make it more realistic.
2. Explain that the health facility-based assessment (FBA) survey is often used to evaluate the quality of health service delivery. This survey consists of three methods:
 1. Observations of health worker practices
 2. Review of health records and drug/supply registers
 3. Interviews with mothers to identify their knowledge, attitudes, and practices for treating febrile children

The results of the survey may be used to –

- Revise outcome objectives.
- Arrange program activities in a logical sequence.
- Modify the time table and budget.

3. Present the objectives of the field trip.

Learning Aid #10

Explain that the visit to the health facilities is a structured learning exercise. The survey is nonrepresentative, and the elements in the questionnaires are only examples taken from one country's policy on case management. The number of children observed in each health facility will be limited to ten for logistical reasons. In an actual health facility survey, the number of children observed would be based on a representative sample.

4. Divide participants into 3 groups, based on the type of survey data to be collected during the field trip:
1. Observations of health agent practices
 2. Exit interviews on KAP of mothers
 3. Record review: essential drugs/supplies/management data

Read the procedures for your section of the FBA survey.

Learning Aid #11 (Appendix D)

5. Divide participants into seven groups – one group for each of the different health facilities that will be visited.

Read the procedures for conducting the FBA survey.

Learning Aid #12 (Appendix D)

6. Explain to participants the logistics for the field trip, including means of transportation to the health facilities and time allocated for the visit.

Lesson Plan 4: Implementation Plan

7. Summarize the task, using the guide for facilitators, and encourage the participants to ask questions or make comments before going to the health facilities.

Learning Aid #13

8. Conduct site visit to health facilities. (Approx. 4 hours)
9. Upon return from the field, divide participants into 3 groups according to the type of survey conducted during the site visit:
 - Observation of health agent practices
 - Exit interviews on KAP of mothers
 - Record review: essential drugs/supplies/management data
10. Show the participants how to tabulate the data and how to present them in graphs. Distribute the guide with the directions for analyzing the data. Allow one and a half hours for the groups to complete the task.

Learning Aid #14 (Appendix D)

11. Upon completion of task, reconvene the groups in a plenary session and have a representative from each group present the results of their survey. List the frequencies on a flip chart for selected questions for each survey.
12. Summarize the results of the survey.
13. Remind participants that the results of the health facility survey can be used to –
 - Revise outcome objectives of the program plan.
 - Arrange program activities in a logical sequence.
 - Modify the time table and budget.

14. Discuss when and under what conditions outcome objectives and activities may need to be revised.

Learning Aid #15

15. Remind participants of the results of the field trip. Ask them to make recommendations to the program manager from the country where the facility survey was conducted about possible modifications in the existing implementation plan based on the above criteria.

Synthesis/Summary (20 minutes)

1. Ask participants to summarize the main points/conclusions of this lesson plan.

Learning Aid #16

2. Ask participants to comment on the pertinence and the applicability of the skills they acquired during this lesson plan to the situations in their respective countries.
3. Remind the participants that there was insufficient time in this session to develop an implementation worksheet for each activity or a composite implementation plan. Explain that there will be additional time to work on the implementation worksheets during the last two days of the workshop.
4. Review the accomplishment of the session's learning objectives (title page).

LEARNING AIDS

Learning Aid #1 Components of the planning process and where we are

1. Impact objectives and indicators
2. Outcome objectives and indicators
3. **Implementation plan -- *We are here***
4. Monitoring plan
5. Evaluation plan

Learning Aid #2 Definitions of terms

Activities: Program operations necessary to accomplish outcome objectives.

Major Program Activities:

- Health information system (epidemiologic and administrative data, and operational research).
- Health education
- Training
- Supervision
- Essential drugs and supplies

Tasks: The specific steps necessary to perform an activity successfully.

Implementation Plan: A structured summary of who will do what, when, with what level of resources and in what way, to achieve the outcome objectives specified in the program plan.

Learning Aid #3

The importance of an implementation plan

- Provides a concrete statement of the actions the ministry of health (MOH) intends to take to achieve the stated objectives that can be shared with other ministries within the government and with donor agencies
- Serves as basis for ensuring, through monitoring and feedback, that the activities are being conducted as planned, and where adjustments are needed
- Helps in developing the budget and justifies requests for funds from the MOH and external donors
- Facilitates collaboration at several administrative levels with other departments in the MOH that may be called upon to provide their time, staff, materials and other resources

Learning Aid #4

Questions for program implementation

- What should be done?
- By whom?
- When? And in what order?
- Where?
- How?
- With what resources?

Lesson Plan 4: Implementation Plan

Learning Aid #5

Implementation plan worksheet

Activity: _____

Tasks	Person(s) Responsible	Dates	Place	Methods	Cost	Source of Financing

Learning Aid #6

Components of the implementation plan

Tasks	Specific steps necessary to perform an activity successfully, listed in chronological order.
Person(s) Responsible	The implementors of each task. Should be those persons who will carry out the task, and who have the appropriate skills and responsibility to complete the task.
Dates	When the task will be conducted. The specific dates or interval (e.g., daily, monthly, quarterly, biannual) when the task will be conducted.
Place	Where the tasks will take place (e.g., central, regional, district, village).
Methods	Materials and techniques to use for each task. Examples include workshops, meetings, site visits, educational sessions, record review, and reporting. Methods should be practical, useful, and appropriate.
Cost	Estimated budget for task. Unit prices for each task will vary from location to location. (<i>Note: this course is not designed to address budgeting in detail.</i>)
Source of Financing	Government, nongovernmental organizations, international agencies, etc.

Lesson Plan 4: Implementation Plan

Learning Aid #7

Example from Togo's implementation plan

Activity: Training

Tasks	Person(s) Responsible	Dates	Place	Methods	Cost	Source of Financing
1. Develop training modules for doctors, nurses, and midwives.	National coordinator and professors from the medical faculty.	Jan. 15-30 1993	Lome	Meeting	100,000 CFA	Government
2. Train 25 district medical officers	National coordinator and training team	Feb. 8-10 1993	Lome	Workshop	13,499,515 CFA	WHO
3.						
4.						
5.						

Learning Aid #8 Calculations used by Togo to estimate costs

Training of 25 district chief medical officers over 2 days.

Material

Notebooks	$350\text{CFA} \times 25 = 8750$
Pens	$60\text{CFA} \times 25 = 1500$
Conference paper	$3500\text{CFA} \times 2 = 7000$
Markers	$500\text{CFA} \times 5 = 2500$

sub-total = 19750 CFA

Per Diem

Participants	$12000\text{CFA} \times 25 \times 3 \text{ days} = 900000$
Trainers (2)	$12000\text{CFA} \times 2 \times 3 \text{ days} = 72000$
Support Personnel	
Driver	$6500\text{CFA} \times 1 \times 3 \text{ days} = 19500$
Secretary	$8000\text{CFA} \times 1 \times 3 \text{ days} = 24000$

sub-total = 1015500 CFA

Transportation

sub-total = 150000 CFA

Gasoline

sub-total = 100000 CFA

Misc.

sub-total = 64265 CFA

TOTAL COST = 1349515 CFA

Lesson Plan 4: Implementation Plan

Learning Aid #9 **Implementation plan worksheets for practice and feedback exercise**

Activity: _____

Tasks	Person(s) Responsible	Dates	Place	Methods	Cost	Source of Financing

Learning Aid #10

Objectives of the field trip to health facilities

1. Evaluate the performance of health personnel in the case management of febrile children (diagnosis, treatment, education, and referral).
2. Evaluate the availability of drugs, materials and equipment needed for the case management of febrile children.
3. Evaluate the knowledge, attitudes, and practices (KAP) of mothers upon exit from a health facility.

Lesson Plan 4: Implementation Plan

Learning Aid #11 **Protocol for health facility survey application exercise**

See Appendix D

Learning Aid #12 **Guide for the teams**

See Appendix D

Learning Aid #13

Suggestions for facilitators

Review of Task

1. Repeat the purpose of the field visit, if necessary, to be sure all participants understand it.
2. Give a brief description of what will occur during the visit:
 - Observations of case management of children with fever.
 - Interviews with mothers about home case management as they leave the facility.
 - Inventory of drugs and equipment, and review of records.
3. Emphasize that this is an exercise. Participants should understand the following:
 - Facilities to be visited are those that are nearby and likely to have enough children to observe. Therefore, this is not a representative sample of facilities and the data will not reflect the management of children with fever in all locations in the country. If participants were to do this in their countries, they would need to carefully select a representative sample.
 - The instruments to be used are only examples. Survey instruments should be developed in each country to ensure that the items assessed reflect the most important parts of the national policy on case management.
 - We have arbitrarily decided to limit the observations and interviews to 10 per facility. In a more formal survey, the survey design may require more facilities and observations.

Lesson Plan 4: Implementation Plan

Learning Aid #14 **Guidelines for summarizing and presenting field trip data**

See Appendix D

Learning Aid #15 **Considerations for the revision of objectives and activities**

Revision of objectives and activities is based on –

- Appropriate sequencing of activities within an implementation plan.
- Comprehensive coverage of all outcome objectives by an adequate number and diversity of activities.
- Potential for improved coordination of certain activities (e.g., HIS, training, health education).
- Degree of support available for planned activities during the time period for achieving the objective.
- Satisfaction of the needs and concerns of donor agencies.

Learning Aid #16 **Key points from session**

- An implementation plan summarizes for each of the major activities, the tasks to be completed, by whom, when, how, and with what costs.
- The implementation plan is important because it provides information on how the malaria control program intends to achieve its specified outcome objectives. This information may be useful when planning budgets, requesting funds from the MOH and donors, and when coordinating activities with other programs.
- A facility-based assessment of health services can provide data on the performance of health workers, the KAP of mothers upon exit from a clinic, and the availability of drugs and supplies. This data can be used to refine the implementation plan's sequencing of activities and tasks, timetable, and budget.

LESSON PLAN 5

DEVELOPMENT OF A MONITORING PLAN

- OBJECTIVES:** By the end of the session, participants will be able to –
1. Define monitoring.
 2. Explain the usefulness of monitoring a malaria control program.
 3. Define criteria for the choice of activities and tasks to monitor.
 4. Identify administrative options for monitoring.
 5. State at least three data collection methods that can be used to monitor activities.
 6. Develop worksheets for monitoring program activities.
 7. Discuss ways to effectively manage the monitoring of activities.
- METHODS:** Lecture/discussion, demonstration, exercises in small groups and in country teams
- MATERIALS:** Flip chart paper, markers, learning aids
- TIME:** 7 hours

FACILITATOR ACTIVITIES:

Introduction (time: 1 hour)

1. Indicate to the participants where we are in the planning process.

Learning Aid #1

2. Present the objectives of the session (title page).
3. Ask participants to think about the purpose of monitoring. Use the following scenario to stimulate discussion.

Example: The Minister of Health has just returned from an inspection tour of a district. He calls the Director of the Malaria Control Program to his office. He asks him to explain why the district hospital does not have quinine. The Director is unable to give him a satisfactory explanation.

4. Ask participants to describe what could have been done to avoid this situation.
5. Formulate a working definition of monitoring and provide at least one example.

Learning Aid #2

6. Ask participants to describe the relationship between the implementation plan and a monitoring plan.

Learning Aid #3

7. Ask participants to describe the usefulness of monitoring the implementation of the national malaria control program.

Learning Aid #4

8. Discuss the different types of information required for monitoring activities.

Learning Aid #5

Demonstration (time: 1 hour, 30 minutes)

1. Explain that a worksheet is a useful tool in developing a monitoring plan. Show an example of a monitoring worksheet and explain that you will demonstrate how to complete one.

Learning Aid #6

Explain that a monitoring worksheet can be developed for each activity. Together these worksheets can be the basis for the monitoring plan.

2. Ask participants to suggest criteria for selecting which tasks to monitor from among those in the implementation plan.

Learning Aid #7

Note: Since the purpose of the workshop is to develop a national malaria control program plan, the majority of the tasks identified in the implementation plan are those that must be carried out at the central level. Regional and district implementation plans focus on tasks to be completed by regional and district level personnel.

Lesson Plan 5: Monitoring Plan

3. Explain that it is necessary to have an administrative structure to carry out monitoring activities. Ask participants to think of the types of people who would be responsible for monitoring in their country, and to identify the type of administrative structure they might need to ensure that activities are effectively monitored.

Learning Aid #8

4. Ask participants to identify various methods of collecting data on program implementation, and to identify possibilities for when or how often tasks should be monitored.

Learning Aid #9

5. Identify possible sources of monitoring data.

Learning Aid #10

6. Show how to complete the monitoring worksheet using an example of two tasks for HIS activity.

Learning Aid #11

7. Explain to participants that a budget for monitoring should be developed when they return to their countries, since there is not sufficient time during this workshop to discuss the issue.

Practice and Feedback

(time: 2 hours)

1. Explain that the purpose of this exercise is for each country team to complete a monitoring worksheet for one of its priority activities – preferably for the activity they selected in the previous session on developing an "implementation plan."

2. Explain the task.

Learning Aid #12

3. Divide participants into their country teams. Facilitators assigned to country teams should do the following:

- Review the task.
- Inform the participants of the time allotted for the exercise.
- Arrange for the selection of a timekeeper and a note-taker.
- Remain with your designated team throughout the exercise and provide feedback when necessary.

4. Upon completion of the task, each team should join with two other country teams to review and discuss their monitoring worksheets.

5. In the small groups, ask participants to discuss if the monitoring plan is feasible given current resources (time, money, and skills), and to identify additional information, organizational or administrative changes needed to monitor the malaria control program in their countries.

6. Reconvene the participants and ask them the following questions:

- Did you find the monitoring worksheet useful? Why or why not?
- What modifications would you propose to improve upon it?
- Will you be able to complete a monitoring worksheet for each of your priority activities upon return to your countries? If not, what additional information or assistance will you need?

Lesson Plan 5: Monitoring Plan

Application (time: 2 hours)

1. Explain to participants that the purpose of this application section is to discuss several issues related to the management of the monitoring plan, and to give participants the opportunity to plan how they will address these issues in their countries.

Explain that three management issues will be addressed in this section:

1) skilled staff, 2) ensuring quality data, and 3) using monitoring data to improve programs.

2. Remind participants that in the monitoring worksheets they identified who would be responsible for monitoring each task.

Explain that an important management issue related to this part of the monitoring plan is how to train and supervise the people responsible for monitoring.

3. Ask participants if they think there is currently a shortage of staff skilled in the use of different monitoring methods identified in their worksheets (e.g., health facility surveys, record reviews, routine surveillance, etc.).
4. Remind participants that precise job descriptions for those individuals responsible for monitoring program implementation are necessary prior to training. These job descriptions should include tasks for collecting, managing, analyzing, and using data, and providing feedback to different levels of the health care system.
5. Ask participants how the skills of MOH personnel in monitoring program implementation can be improved.

Learning Aid #13

6. Explain to participants that, once trained, the staff responsible for monitoring need to be supervised.

Ask participants to discuss who should be responsible for supervising the monitoring staff. Remind participants that the person(s) chosen must be able to use on-the-job methods of supervision, such as direct observation and immediate feedback on performance.

7. Explain to participants that the second management issue is how to ensure the quality of the monitoring data. Ask participants to identify ways to ensure high quality data.

Learning Aid #14

8. Explain to participants that ensuring the availability of quality data is necessary, but not sufficient, for making sound management decisions. Ask participants to identify ways that they can ensure that monitoring data is translated into information useful to decision makers.

Learning Aid #15

9. Explain to participants that the final management issue of concern is how to ensure that the information produced through monitoring is used to modify program activities. Ask participants to identify how they will use this information to improve their programs.

Learning Aid #16

Lesson Plan 5: Monitoring Plan

10. Explain to participants that they will now have the opportunity to discuss these management issues in more depth in their country teams. Explain that during the next hour, country team members will identify the steps they will take upon return to their countries to ensure the effective management of the monitoring of program implementation.

Explain the task.

Learning Aid #17

11. Divide the participants into country teams. Facilitators assigned to country teams should do the following:
 - Review the task.
 - Inform the participants of the time allotted for the exercise.
 - Arrange for the selection of a timekeeper and a note-taker.
 - Remain with designated team throughout the exercise and provide feedback when necessary.
12. Upon completion of the task, reconvene the participants. Ask selected participants to summarize the issues discussed in country teams.

Summary/Synthesis (time: 30 minutes)

1. Ask participants to summarize the key points of this session.

Learning Aid #18

2. Ask participants to comment on the relevance and the applicability of skills learned during this session for the situation in their country.

3. Remind participants that there is not enough time in this workshop for each country to prepare monitoring worksheets for all activities, but that they should plan to complete them upon return to their countries.

Once all monitoring worksheets have been completed, a summary calendar should be developed that shows when all monitoring tasks will take place within a given time frame.

4. Determine whether the objectives of the session have been successfully completed (title page).

LEARNING AIDS

Learning Aid #1 Components of the planning process and where we are

1. Impact objective and indicators
2. Outcome objectives and indicators
3. Implementation plan
4. **Monitoring plan – *We are here***
5. Evaluation plan

Learning Aid #2 Definition of monitoring

Monitoring

The process of systematically collecting and using information on program implementation to ensure that activities and tasks are being carried out as planned and to identify operational problems that need attention.

Examples:

Verify, by conducting a review of training activities, that X nurses have been trained in case management of febrile children during 1993.

Verify, by reviewing quarterly reports, that stocks of antimalarial drugs present in selected clinics during the past three months were sufficient to treat all patients appropriately.

Verify, by asking supervisors, that surveillance reports from health facilities are being received within the required time period at district or regional offices.

Learning Aid #3 Relationship between the implementation plan and a monitoring plan

Implementation Plan: Describes what activities and tasks need to be accomplished, by whom, in what order, when, how, and with what resources to reach program objectives (process or outcome)

Monitoring Plan: Describes what information needs to be collected by whom, when, and how, to determine the extent to which the activities and tasks described in the implementation plan are being carried out during program implementation

Learning Aid #4 The usefulness of monitoring

1. Monitoring allows the program manager to assess whether the implementation of activities is progressing as expected.
2. It allows early identification of problems – current or potential – and their prompt resolution or prevention.
3. It allows program managers to respond adequately to requests by administrators or donors to account for the allocation and use of resources.

Learning Aid #5 Types of information needed for monitoring activities

- What tasks to monitor
- Who should monitor
- How to monitor – methods
- When (how often) to monitor
- Where to find the information – sources of data

Lesson Plan 5: Monitoring Plan

Learning Aid #6

Example of a monitoring worksheet

Activity or Process objective: _____

Tasks to Monitor	Person responsible for monitoring	Methods	When (how often) to monitor	Sources of data
1.				
2.				
3.				
4.				
5.				
6.				
7.				

Learning Aid #7 Criteria for choosing tasks to monitor

The following criteria can be useful in selecting tasks to be monitored:

- How critical or important the task is to the success of the program
- How new the task is and if has it been fully tried out
- How well the task reflects the quantity and quality of work being done
- How easily observable the task is
- How often the task is conducted

Learning Aid #8 Administrative options for monitoring

- Build on existing HIS or MIS structures, and current supervisory system.
- Create new administrative structures, such as a national monitoring and evaluation unit, that would design monitoring plans, test plans, develop forms and train personnel.
- Employ staff specifically responsible for monitoring.
- Train and support current staff, such as district or regional supervisors, to take on monitoring responsibilities, and revise their job descriptions to reflect these new duties.
- Designate yourself, as program manager, responsible for monitoring of activities.

Example of administrative structure for monitoring

National program manager	CENTRAL LEVEL
Chief medical officer and supervisory team	REGIONAL LEVEL
District medical officer	DISTRICT LEVEL
Health center director	FACILITY LEVEL

Learning Aid #9

Methods to use when monitoring tasks and the frequency

Methods

- Examination of written documents and reports
- Examination of sentinel data
- Discussion with a target group
- Observations of health workers
- Discussions with health workers
- Review of clinic records and supplies
- Discussions with mothers
- Home visits to patients
- Community visits

Frequency

- The frequency of monitoring depends upon the method being used. Examples include daily, weekly, monthly, quarterly, bi-yearly, and yearly.
- The determination of when to monitor tasks is based upon how often the task is done, when changes are expected to take place, critical times during the implementation of the task, and who is available to monitor the task.

Learning Aid #10 **Sources of data and information**

- Health clinics and hospitals
- Monthly/annual reports
- Special surveys
- Newsletters and bulletins
- Health information system – epidemiological surveillance data
- Regional or district supervisors

Lesson Plan 5: Monitoring Plan

Learning Aid #11

Example of a monitoring worksheet

Activity: Health Information Systems for Malaria Control

Tasks to Monitor	Person responsible for monitoring	Methods	When (how often) to monitor	Sources of data
1. Develop case definition	Program manager	Review reports	Initially	Monthly reports
2. Create morbidity forms	Program manager & stat. unit	Discussions and review reports	Initially	Stat. unit supervisor
3. Assess drug resistance	Supervisor of labs	Review reports	Quarterly	Supervisory reports & surveys
4. Assess drug use	Regional & district chief medical officers	Review reports	Quarterly	Regional and district MOH
5. Train health workers to report	Training coordinator	Observe and test health workers	During workshop & follow-up	Trainees and trainers
6. Compile reports	Program manager & chief medical officers	Review reports	Monthly	Clinics & regional & district supervisor
7. Analyze reports	Program manager & stat. unit	Observe and review reports	Monthly	Surveillance data

Note: This is only an example – each task and subsequent columns would vary depending upon country interests. Other examples can be used if available.

Learning Aid #12 Practice and feedback exercise

1. Select an activity from among those listed below. It is preferable if the activity you select is the same as the one you selected for your implementation plan in the previous session.

Activities:

- Training
- Supervision
- Health education
- Essential drugs and supplies
- Epidemiological surveillance / HIS

2. Complete a monitoring worksheet for the activity and determine the following:
 - What tasks to monitor (selected from those listed in the implementation plan)
 - Who will monitor the tasks
 - When or how often to monitor the tasks
 - What methods to use to monitor the tasks
 - Where to find the information or sources of data
3. Upon completion, discuss your work with other country teams. Try to address the following:
 - a. Is the monitoring plan feasible given current resources (time, money, and skills)?
 - b. What additional information or organizational or administrative changes will you need to monitor the malaria control program in your country?

Practice and Feedback Exercise: Monitoring Worksheet

Activity or Process Objective: _____

Tasks to Monitor	Person responsible for monitoring	Methods	When (how often) to monitor	Sources of data
1.				
2.				
3.				
4.				
5.				
6.				
7.				

Learning Aid #13 Ways to improve the skills of personnel with responsibilities for monitoring program implementation

- Pre-service training
- In-service training
- Third-country training
- As a part of routine supervision
- Mentoring with a trained colleague (national, from another country, or from an international organization)

Learning Aid #14 Ways to ensure quality data

- Periodic reviews of supervision data
- Auditing of records during supervisory visits
- Routine or special quality assurance activities in response to identified problems

Learning Aid #15 Ways to translate data into usable and useful information

- Establish mechanisms to ensure timely submission of data to the MOH
- Work with personnel in other health programs to coordinate collection and analysis of data
- Summarize data into a usable format (e.g., charts, graphs, tables) that can be easily communicated to decision makers
- Issue a periodic surveillance bulletin or newsletter to persons contributing to malaria surveillance and control.

Learning Aid #16

How to use monitoring information to modify program activities

- Revise the implementation plan (i.e., who does what task, where, how often and with what methods)
- Synthesize monitoring data for use in broader program evaluation activities
- Discuss evolving needs and changing program priorities with MOH decision makers and donors
- Revise the monitoring plan

Learning Aid #17

Application task

In country teams, discuss the following management issues. Write ideas on flip-chart paper and be prepared to present selected points to the large group.

1. Review the monitoring plan drafted during the practice and feedback exercise. In the column under "person responsible for monitoring," identify the types of people listed and discuss how the program is prepared to improve their skills in monitoring program implementation. List the steps you will need to take upon return to your country.

Discuss who will be responsible for supervising the monitoring staff.

2. In the column under "methods" and "sources of data" review the types of methods and data sources listed in the monitoring plan. Discuss how the program will ensure the quality of this data. List the steps you will need to take upon return to your country.
3. Discuss ways in which your country's program can ensure that the data produced through monitoring is translated into information useful to decision makers.
4. Identify the steps your country will take to ensure that the information produced through monitoring activities is used to modify the program.

Learning Aid #18

Key points of the session:

- Monitoring is the process of systematically collecting and using information on program implementation to ensure that activities and tasks are being carried out as planned and to identify operational problems that need attention.
- Information obtained through monitoring methods can be used to measure the progress of the program activities and to modify activities as needed.
- Tasks that are new, critical to the success of the program, and easily observable should be chosen for monitoring.
- The responsibility for monitoring activities can be given to existing staff, new staff, or to a monitoring unit.
- Observations of health workers, review of records, and discussions with health workers and patients are methods commonly used to monitor activities.
- The monitoring worksheet can be useful when developing a monitoring plan for the malaria control program.
- An effective monitoring system includes skilled personnel, quality data, and results that are being used to improve the program.

LESSON PLAN 6

DEVELOPMENT OF AN EVALUATION PLAN FOR MEASURING THE ATTAINMENT OF OBJECTIVES

- OBJECTIVES:** By the end of the session, participants will be able to –
1. Explain the importance of developing an evaluation plan for a malaria control program.
 2. Describe challenges in conducting program evaluation.
 3. Describe the different sections of an evaluation plan, and the steps in planning an evaluation.
 4. Develop at least two indicators to measure progress toward selected outcome objectives.
 5. Complete a worksheet on planning program evaluation that includes the identification of indicators, sources of data to measure the indicators, data collection methods, and the frequency of indicator measurement.
 6. Describe how the program will support personnel conducting evaluation activities, ensure the quality of evaluation data, and ensure that evaluation results are used to improve the program.
- METHODS:** Lecture, discussion, demonstration, small group and country team exercises
- MATERIALS:** Flip chart paper, pens, markers, overhead projector, learning aids
- TIME:** 8 hours

FACILITATOR ACTIVITIES:

Introduction (time: 1 hour)

1. Show participants where we are in the planning process.

Learning Aid #1

2. Present session objectives. (title page)

3. Explain that evaluation is a critical element of malaria control programs. Ask participants to describe the difference between monitoring (as presented in the previous session) and evaluation.

Learning Aid #2

4. Explain to participants that the emphasis of evaluation should be on the use of results to plan and improve malaria control programs. Write "Reasons to Evaluate" at the top of a flip chart. Ask participants to identify why a malaria control program plan should include evaluation activities.

Learning Aid #3

Use the participants' own words, and list all the reasons they suggest.

Summarize the list. Point out that it is surprising that more programs are not evaluated considering the value of evaluation.

5. Write "Difficulties in Designing an Evaluation" at the top of a second flip chart sheet. Ask participants to identify the difficulties in designing an evaluation.

Learning Aid #4

Use the participants' own words, and list all the difficulties they identify.

6. Explain that the objectives of the session are designed to try and address these difficulties.
7. Explain that evaluation is a systematic process and that evaluation plans must provide information that is timely, relevant, and useful for practitioners at all levels of the health system.

Describe the four steps in evaluating a program. Explain that we will discuss step 1 during this session.

Learning Aid #5

Demonstration (time: 2 hours, 30 minutes)

1. Explain to participants that the purpose of this demonstration will be to present an example of how to complete the evaluation planning worksheet.
2. Ask participants to identify different elements to be included in an evaluation plan.

Learning Aid #6

Lesson Plan 6: Evaluation Plan

Explain to participants that many of these elements can be assembled in an evaluation worksheet. Show the worksheet and explain that we will briefly discuss the selection of objectives and then review each column in the table.

Learning Aid #7

3. Remind participants of the difficulty in measuring the attainment of impact objectives.

Learning Aid #8

Explain that the most useful approach to impact evaluation for malaria control programs may be to select several imperfect indicators that, when interpreted together, provide a basis for reasonable estimates of mortality and morbidity levels.

4. Explain that, for most countries, a feasible starting place for improving program evaluation is with the careful assessment of those intermediate outcomes of program activities that have a demonstrated relationship to mortality and morbidity.

Explain that program managers may want to focus their evaluation efforts on the outcomes of malaria case management in health facilities, the priority intervention in most African countries. Explain that, during this session, we will be developing an evaluation plan for the outcome objectives and indicators for three levels: (1) health worker performance, (2) facility management of drugs and supplies, and (3) behavior of mothers.

Review with participants the diagram presented in an earlier session on outcome objectives.

Learning Aid #9

5. Explain to participants that the documentation of indicator levels over time can provide program managers with a "snapshot" of program progress and help them identify and remedy operational problems.

Explain that tracking of indicators over time can reveal trends associated with program interventions and signal a need for action to overcome operational problems. It cannot replace operational research as a source of definitive data on intervention efficacy.

6. Explain to participants that most national malaria control programs do not presently have the personnel or financial resources to design and implement comprehensive evaluations of their programs. Explain that a practical approach is to select a limited number of objectives and indicators to evaluate.

Learning Aid #10

7. Ask participants to select an outcome objective and several indicators developed earlier in the workshop regarding health worker performance, availability of drugs and supplies, and behavior (KAP) of mothers. Write the objective and the indicators on the worksheet in the appropriate places.
8. Ask participants to identify possible methods to use to collect indicator data on each of the selected outcome objectives.

Learning Aid #11

9. Explain that there are (1) primary data sources that are developed solely for the purpose of program evaluation; and (2) secondary data sources that are developed for another purpose, which may provide information useful in the evaluation of malaria control programs.

Ask participants to give examples of primary and secondary data sources for the sample indicators and record them on the worksheet.

Learning Aid #12

Lesson Plan 6: Evaluation Plan

10. Explain that there are several factors that will affect the choice of data sources and data collection methods. Point out the importance of cost and feasibility in the choice of methods. Explain that health information systems (HIS), where available, represent a sustainable alternative to conducting special surveys to obtain indicator data.

Learning Aid #13

11. Explain that frequency refers to how often indicator levels are measured. Explain the basic issues to consider in determining frequency, and ask for other ideas from participants.

Learning Aid #14

12. Discuss the importance of identifying people who will be responsible for collecting and summarizing each type of data. Present some criteria for selecting those responsible for evaluation activities and ask participants to make further suggestions. Emphasize that this responsibility must be added to individuals' job descriptions, if it is not there already.

Learning Aid #15

13. Present participants with an example of a completed worksheet for evaluating an outcome objective on improving health worker performance. Have participants take turns reading the items on the table, and identifying alternative choices that could be made for methods, frequency, and person(s) responsible.

Learning Aid #16

14. Ask participants if they have any questions on how the worksheet was completed. Tell them that they will be completing a similar worksheet in their country teams during the next exercise.

Practice and Feedback (time: 2 hours)

1. Explain that the purpose of this exercise is to allow participants the opportunity to practice planning an evaluation.
2. Explain the task.

Learning Aid #17

3. Divide participants into their country teams. Facilitators assigned to country teams should do the following:
 - Review the task.
 - Inform participants of the time allotted for the exercise.
 - Arrange for the selection of a timekeeper and a note-taker.
 - Remain with designated team throughout the exercise and provide feedback when necessary.
4. Reconvene the participants in a plenary session. Ask representatives from selected country teams to present their work. Ensure that participants describe how they –
 - a. Chose a limited set of indicators for evaluation
 - b. Selected methods and data sources
 - c. Decided on the frequency of data collection for each indicator
 - d. Selected those responsible for collecting, analyzing, and reporting data

Lesson Plan 6: Evaluation Plan

5. Solicit comments from other participants. Ask the different presenting groups to compare and contrast their evaluation plans by discussing the following:
 - Among the indicators listed in the different evaluation plans, identify if the data will be collected in health facilities or in the community.
 - Among the different methods listed in the different evaluation plans, describe how feasible these will be to conduct based on the frequency of measurement indicated.
 - Among the different types of people identified as responsible for collecting the data, describe how the current administrative/organizational structure will support these people in their evaluation duties, or how the structure will need to be changed.

6. Explain to participants that it is not necessary to develop fixed standard objectives and indicators, but that their evaluation plans should be based on what is feasible in their countries given their current level of development and available resources.

Emphasize the importance of starting small and building evaluation capacities within the MOH, rather than developing a large-scale evaluation plan that is dependent upon external resources.

7. Explain to participants that this type of evaluation planning worksheet can be completed for each of their major impact and outcome program objectives and incorporated into a comprehensive evaluation plan that includes a budget and calendar of activities.

Application **(time: 2 hours)**

1. Explain that evaluation must be planned and implemented using sound management principles. Because evaluation may be a relatively new or unfamiliar element in many public health programs, there may be only limited experience in administering evaluation-related activities in the malaria control program.

2. Explain to participants that the purpose of this application section is to discuss several issues on how to manage evaluation activities, and to give participants the opportunity to write preliminary steps to resolving those issues in their countries.

Remind participants that we discussed similar management issues during the session on monitoring.

3. Ask participants to think of how they planned to improve the monitoring skills of MOH staff and compare these strategies with how they plan to improve the evaluation skills of MOH personnel.

Remind participants that precise job descriptions for evaluation duties, including collecting, analyzing, reporting, and using data are as important for evaluation as they were for monitoring.

4. Ask participants to think about how they planned to control the quality of monitoring data, and ask if these same strategies can be applied to ensuring the quality of evaluation data.

Lesson Plan 6: Evaluation Plan

5. Ask participants who have participated in recent program evaluations in their countries to respond to the following questions:
 - Who had access to the results of the evaluation? Who else has seen these results and when did they see them?
 - How have the results been used to modify the program?
 - Are you in agreement with how the evaluation results were used to improve the program? If not, what would you have done differently?

6. Explain to participants that an important aspect of planning an evaluation is to specify, in advance, who should see the results of the evaluation, in what form, and what strategies will be adopted to assure that the results will be used to improve the program.

Ask participants to suggest ways for ensuring that evaluation results are used by program managers and other MOH staff.

Learning Aid #18

7. Explain to participants that they will now have the opportunity to discuss these management issues in their country teams. Explain that during the next hour, country team members will identify the steps they need to take upon return to their countries to ensure the effective management of evaluation.

Explain the task.

Learning Aid #19

8. Divide participants into their country teams. Facilitators assigned to country teams should do the following:
 - Review the task.
 - Inform participants of the time allotted for the exercise.
 - Arrange for the selection of a timekeeper and a note-taker.
 - Remain with designated team throughout the exercise and provide feedback when necessary.

9. Upon completion of the task, have country teams assemble into the large group. Ask selected participants to summarize how they plan to support personnel in their evaluation duties, to ensure the quality of data, and ensure that evaluation results are used to improve the program.

Summary/Synthesis

(time: 30 minutes)

1. Remind participants that program evaluation is essential to improving the quality and effectiveness of programs. Managers must start small and advance incrementally.
2. Ask participants to summarize the key points of the session.

Learning Aid #20

3. Remind participants that there was not enough time during the session to develop a comprehensive evaluation plan, but that they will have additional time during the next session to further develop all components of their program plan.
4. Ask participants to comment on the relevance and the applicability of skills learned during this session, and if there are additional evaluation issues that need to be discussed.
5. Review the accomplishment of the session's learning objectives (title page).
6. Thank everyone for their participation during the workshop. Explain that the last day will be used to continue work in each of the planning areas discussed during the workshop. Facilitators will be available to work with participants, and to provide feedback, answer questions, and summarize key issues.

LEARNING AIDS

Learning Aid #1 Components of the planning process and where we are

1. Impact objectives and indicators
2. Outcome objectives and indicators
3. Implementation plan
4. Monitoring plan
5. **Evaluation plan – *We are here***

Learning Aid #2 Definitions of monitoring and evaluation

Monitoring The process of systematically collecting and using information on program implementation to ensure that activities and tasks are being carried out as planned and to identify operational problems that need attention

Evaluation Systematic collection and use of data to ascertain the achievement of program objectives and improve program operations

(Note: For the purpose of this workshop, a distinction has been made between monitoring and evaluation. Monitoring, which tracks the process of program implementation, may be more within the means of the MOH. Evaluation which measures achievement of outcomes and impact, may depend more upon external assistance.)

Learning Aid #3 **Reasons to evaluate the malaria control program**

- Provides evidence that program objectives have/have not been achieved
- Provides information about how to improve programs
- Justifies the use of resources
- Identifies future resource needs

Learning Aid #4 **Difficulties in designing and conducting an evaluation**

- High costs
- Lack of staff
- Not sure of methods
- Confusion with roles of MOH versus external evaluation
- Unclear about what to do with results

Learning Aid #5

The steps in evaluating a program

Step 1: Plan the evaluation

- Decide which objectives should be evaluated
- Choose indicators
- Identify methods and sources of data
- Identify who will be responsible for the evaluation tasks
- Plan how the results of the evaluation will be used to revise the program

Step 2: Collect the data

Step 3: Interpret the results

Step 4: Communicate the results and use them to revise the program

Learning Aid #6 The elements of an evaluation plan

An evaluation plan can include the following:

- The outcome and impact objectives to be evaluated
- The indicators to use to measure progress toward the objectives
- The methods and sources of data for each indicator
- The frequency of data collection
- The individuals responsible for collecting, summarizing, analyzing, and reporting indicator data

Learning Aid #7

Evaluation planning worksheet

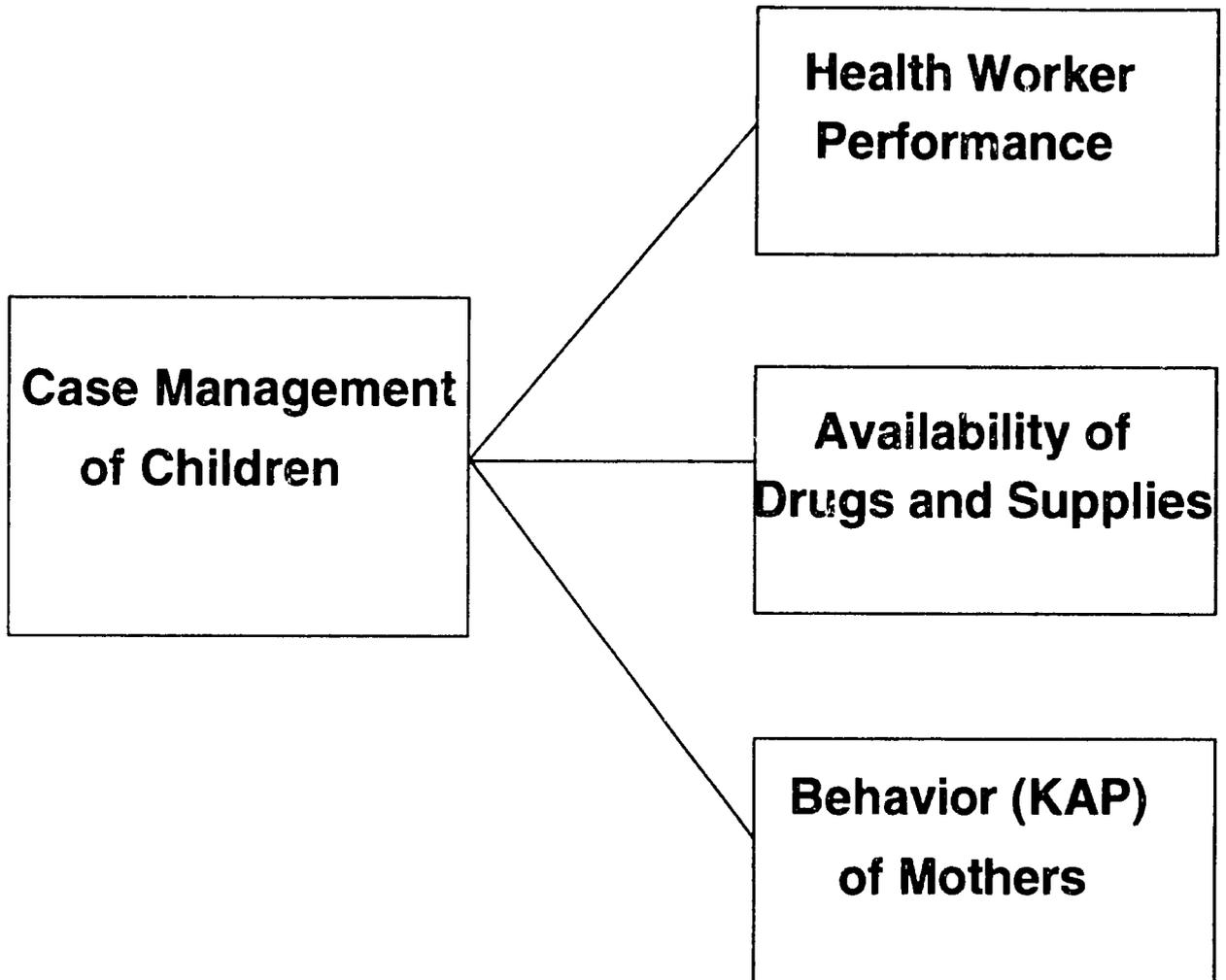
Objective: _____

indicator	Method / Source of data	Frequency	Person responsible

Learning Aid #8

Difficulties in measuring attainment of impact objectives

- Measurement of malaria-attributable mortality and morbidity poses unusual challenges due to the absence of a uniform case definition, and to inadequate microscopic diagnostic capabilities.
- Most malaria-related mortality and morbidity in Africa occurs in the community and is not seen and reported through facility-based sentinel or surveillance systems.



Learning Aid #10 Selecting Indicators

The final group of indicators selected should be –

- Efficient (i.e., multiple indicators may be measured through a single data source)
- Limited in number
- Comprehensive (i.e., should provide adequate coverage of important program objectives)
- Representative of aspects of the program where problems are anticipated based on prior experience
- Representative of the political interest of the MOH and donor agencies
- Reflective of the current level of MOH or donor agency resources (money, time, people available for evaluation)

Learning Aid #11 **Possible evaluation methods for three program outcomes**

Health worker performance

- Observation
- Activity reports
- Record review

Availability of drugs and supplies

- Inventory
- Supply and stock registers/records
- Reports

Behavior (KAP) of mothers

- Entrance or exit interviews with mothers in the health facilities
- Community surveys
- Observation

Learning Aid #12 Sources of data

Primary data sources

(1) Community-based surveys

Often resource-intensive, these surveys are necessary to obtain information on key elements of malaria control activities such as frequency of febrile episodes, compliance with recommended treatment, and availability of antimalarials in the community.

(2) Facility-based assessments

These surveys may include observations of providers, inventories of facility resources, record reviews, and interviews with patients.

(3) Supervisory Reports

These reports often provide information on health worker performance, and drug registers.

Secondary data sources

(1) Health or management information systems

They should provide most of the information necessary to measure health impact indicators. In countries without a HIS, it may be necessary to develop sentinel systems.

(2) Survey data collected for other purposes

Data may be available through demographic surveys or health surveys conducted by other health programs (e.g., CDD, EPI, or AIDS).

Learning Aid #13

Factors affecting the choice of methods

- Quality of data
 - Valid
 - Reliable
 - Recent
- Cost
- Feasibility/Simplicity
- Comparability of resulting data with indicator data collected at other times, in other places, or through different methods

Learning Aid #14

Determining frequency

When estimating periodicity for individual indicators, keep in mind the following:

- (1) The desired frequency of measurement may vary by objective.
- (2) Indicators should be expected to change as a result of programmatic activities, and this change should occur within a reasonable time after activities occur. Results should be analyzed and available for use in program reviews, budgeting, and replanning.
- (3) Where appropriate, baseline levels should be obtained before program intervention begins. The baseline may be constructed historically if secondary data sources are used; for primary sources, allow sufficient time to collect and analyze data and incorporate results into program planning.
- (4) Follow-up indicator measurements need not be conducted until there is some reason to believe there has been significant change in indicator levels.

Learning Aid #15

Criteria for selecting persons responsible for evaluation activities

- A person who needs the information and who will understand why and how to use the data
- A person with direct access to the data
- A person trained in how to systematically collect and manage data

Lesson Plan 6: Evaluation Plan

Learning Aid #16

Example of an evaluation planning worksheet

Objective: By 1998, 80% of febrile children under 5 visiting a health facility will receive correct case management.

Indicator	Method / Source of data	Frequency	Person responsible
<u>Diagnosis:</u> % of patients whose temperature is taken with a working thermometer	Observations of health workers during a health facility assessment survey and during routine supervision	Yearly	District medical officers and regional malaria program managers
<u>Treatment:</u> % of patients diagnosed with malaria by the provider who are prescribed treatment in accordance with national policy	Observations of health workers Review of patient records during health facility assessments and routine supervision	Routine monitoring information collected on a quarterly basis	Supervisors, district and regional program managers
<u>Patient education:</u> % of patients diagnosed with malaria by the provider, whose caretakers receive an explanation of the treatment regimen	Observations of health workers during a health facility assessment.	Yearly	District medical officers
<u>Referral:</u> % of patients seen by the provider and meeting national criteria for referral, who are referred	Review of patient records during health facility surveys	Yearly	District medical officers

Learning Aid #17 **Practice and feedback exercise**

In your country teams –

1. Complete an evaluation planning worksheet for at least three of your outcome objectives, selecting one in each of the following areas: health worker performance, facility resources/availability of drugs and supplies, and behaviors of mothers.

2. Be prepared to discuss how you –
 - Chose a limited set of outcome indicators for evaluating the malaria control program.
 - Selected methods and data sources.
 - Decided on the frequency of data collection for each indicator.
 - Selected those responsible for collecting, analyzing, and reporting evaluation data.

Evaluation planning worksheet

Objective: _____

Indicator	Method / Source of data	Frequency	Person responsible

Learning Aid #18 Strategies for ensuring the use of evaluation results

- Include analysis, summary, and communication of data in job descriptions of appropriate personnel.
- Set time frames for completing analysis, summary, and communication of results.
- Present data graphically when appropriate to highlight essential findings of evaluation
- Include concise executive summaries in evaluation reports
- Include those responsible for evaluation activities in planning and replanning exercises.
- Request evaluation results when preparing planning documents and program reports; encouraging others to do the same.
- Disseminate information in epidemiologic bulletin or malaria surveillance newsletter

Learning Aid #19

Application exercise

In your country teams discuss the following management issues. Write your ideas on paper and be prepared to present selected points to the large group.

1. Review the evaluation worksheet you just completed during the practice and feedback exercise. In the column marked "person responsible," identify the people listed and discuss how your program is prepared to support them in their evaluation duties. Compare these ideas with those drafted on how to improve monitoring skills discussed during the previous session.

Discuss who will be responsible for supervising the evaluation personnel.

2. In the column on your evaluation worksheet marked "methods and sources of data," review the different types listed. Compare these to the types of methods and data sources identified for monitoring. Discuss how your program will ensure the quality of these data.
3. Identify strategies your country will take to ensure that evaluation results are reported to the appropriate people, and that the information is used to improve the program. Discuss the following issues:
 - The mechanisms (how, when, and by whom) by which feedback on evaluation reports will be provided to peripheral levels of the health system
 - The clients for whom evaluation reports will be produced, and the frequency of reporting
 - Specific strategies for ensuring that evaluation results are available and incorporated into program reviews, program replanning exercises, and new project development
 - The individuals and the mechanisms to ensure that the evaluation plan is reviewed and revised

Learning Aid #20

Key points of the session

- Evaluation efforts can be designed and carried out by program managers to produce timely, accurate information about the attainment of program objectives.
- Evaluation should start with small steps that can be carried out by the country and that can be expanded upon progressively. For example, most countries may find it more feasible and useful to begin with the evaluation of program outcomes, and move to improved evaluation of health impact as their skills and resources expand.
- Evaluation must be addressed early in the program planning process. For example, job descriptions for individuals responsible for implementing and supervising evaluation activities must be developed during the planning stage.
- Evaluation plans should include the objectives to be evaluated, the indicators to measure progress toward the objectives, the methods and sources of data, and the individuals responsible for collecting and reporting indicator data.
- Evaluation is only useful if the results are used to improve programs. Evaluation plans should specify clearly how the results will be summarized, communicated, and used in project planning and replanning.

LESSON PLAN 7
A PRELIMINARY
NATIONAL MALARIA CONTROL PROGRAM PLAN

- OBJECTIVES:** By the end of the session, participants will be able to –
1. Develop impact objectives and indicators.
 2. Develop outcome objectives and indicators.
 3. Prepare a program implementation plan.
 4. Prepare a program monitoring plan.
 5. Prepare a program evaluation plan.
 6. Identify ways to ensure the quality of a program plan.
 7. Discuss steps to take upon return to their countries to complete the plan and to advocate for plan approval.

METHODS: Large and small group exercises

MATERIAL: Learning aids, flip chart paper, markers, lesson plans 2-6

TIME: 2 days

FACILITATOR ACTIVITIES:

NOTE: This lesson plan does not follow the standard format. Instead, it includes three sections: introduction, application, and summary.

Introduction (time: 1 hour)

1. Explain to participants that during the workshop they have had the opportunity to practice developing portions of a plan for their malaria control program, and to discuss how to manage components of the plan.
2. Explain that the purpose of these next two days will be to review each of the planning steps in their country teams, and to draft a preliminary plan for their country.

Explain to participants that, although they have already worked on certain components of their plan, it is important to spend time assembling the parts into a cohesive document that can be the starting point for further planning and discussion with ministry of health colleagues.

Encourage participants to do the best they can with the limited time available and to plan their time carefully for working on each section.

3. Present the session objectives (title page).
4. Explain to participants that they will be working in their country teams to develop the preliminary plan and that facilitators will be assigned to assist each country team.

5. Ask participants which parts of the planning process discussed during the workshop (e.g., impact objectives and indicators, outcome objectives and indicators, implementation plan, monitoring plan, and evaluation plan) they would like to review.

Use learning aids from the previous sessions to guide this review.

6. Explain to participants that many aspects of writing a quality program plan were discussed during the workshop, and that it may be useful to review some key issues to consider while drafting the plan.

Learning Aid #1

Tell participants that we will be reviewing this list again after they have had time to write their preliminary program plans.

Application **(time: 1.5 days -- 12 hours)**

1. Distribute the instructions for the exercise and the planning worksheets that participants are expected to complete during this exercise. Explain that most of these worksheets are the same as those used during previous sessions.

Learning Aid #2

2. Review the instructions.
3. Divide participants into their country teams.

Lesson Plan 7: A Preliminary Program Plan

4. Facilitators assigned to each group should do the following:
 - Review the task
 - Inform participants of the time allotted for the exercise
 - Arrange for the selection of a timekeeper and a note-taker.
 - Remain with your designated team throughout the exercise and provide feedback when necessary.

5. Reconvene the participants into a plenary session on the second day and –
 - Ask participants if they have any comments or concerns about the planning exercise that need to be shared with the group.
 - Ask participants who have had experience planning other public health programs if they could compare that planning process to the one just completed during this workshop.

6. Ask participants to report on the steps they plan to take upon return to their countries to complete the plan.

Learning Aid #3

7. Ask participants to report on the steps they plan to take upon return to their country to advocate for plan acceptance by the MOH.

Learning Aid #4

8. Ask participants to address the difficulties they anticipate in gaining plan approval.

Summary/Synthesis (time: 1 hour)

1. Ask participants to review the key points of the workshop.

Learning Aid #5

2. Explain to participants that program plans must be periodically reviewed and revised. Revisions can be made on the basis of monitoring and evaluation data, availability of resources, and the priorities of the ministry.
3. Ask participants to comment on the relevance of the workshop and the possibility of applying what they have learned on planning upon return to their countries.
4. Ask participants if they have any comments or questions on what they have learned during the workshop.
5. Review the accomplishment of the session's learning objectives (title page).
6. Thank the participants for their active participation and hard work during the workshop.

Learning Aids

Learning Aid #1 Issues to consider when developing or revising a program plan

- Does the plan contain the recommended components?
 - Program objectives (impact and outcome)
 - Indicators to measure objectives
 - Implementation plan, including activities, tasks, who is responsible for the task, when it will take place, methods to use, how much it will cost, and where the funds will come from
 - Monitoring plan, including tasks to monitor, who is responsible for monitoring, sources of data, and when to monitor
 - Evaluation plan, including indicators to evaluate, who is responsible for evaluating, when, and using what methods

- Does the plan reflect the current policy for malaria control?

- Are the program objectives appropriate and feasible given current technical knowledge of malaria in your country, and current levels of resources?

- Are indicators directly related to program objectives?

- How likely is the implementation plan to lead to achievement of program objectives and changes in indicator levels?

- How well do the parts of the plan fit together? Are they presented in a logical flow that is clear and easy to follow?

Learning Aid #2

Application exercise: Guidelines for drafting a preliminary malaria control program plan

In your country teams –

1. Review the impact and outcome objectives and indicators, the implementation plan, the monitoring plan, and the evaluation plan drafted in previous sessions.

Impact objectives and indicators: refer to session 2

Outcome objectives and indicators: refer to session 3

Implementation plan: refer to session 4

Monitoring plan: refer to session 5

Evaluation plan: refer to session 6

2. Complete each of the planning worksheets. Make additional copies of the worksheets as needed.

Since time is limited during this workshop, focus on developing implementation and monitoring worksheets for your priority activities, and an evaluation worksheet for your outcome objectives.

3. Review the list of considerations for developing a quality plan (Learning aid #1)
4. Identify the steps your country team will take to complete your malaria control program plan upon return to your country.
5. Identify the steps your country team will take to advocate for plan approval.

IMPACT OBJECTIVES AND INDICATORS

Mortality objectives	Mortality indicators
Morbidity objectives	Morbidity indicators

OUTCOME OBJECTIVES AND INDICATORS

Case management of patients objectives	Case management of patients indicators
Health worker performance objectives	Health worker performance indicators

Lesson Plan 7: A Preliminary Program Plan

Facility resources objectives	Facility resources indicators
Behavior of mothers/caretakers objectives	Behavior of mothers/caretakers indicators

IMPLEMENTATION PLANNING WORKSHEET

Activity or Process Objective: _____

Tasks	Person(s) Responsible	Dates	Place	Methods	Cost	Source of Financing

MONITORING PLANNING WORKSHEET

Activity or Process Objective: _____

Tasks to Monitor	Persons responsible	Methods	When (how often) to monitor	Sources of data
1.				
2.				
3.				
4.				
5.				
6.				
7.				

EVALUATION PLANNING WORKSHEET

Impact or Outcome Objective: _____

Indicator	Method / Source of data	Frequency	Person responsible

Learning Aid #3 Steps to take to complete the program plan

- Locate data on current objectives and indicators.
- Locate current budgets.
- Speak with personnel that have responsibilities for implementation (training and health education departments, HIS/statistical units, etc.).
- Contact personnel involved in supervision and monitoring of activities.
- Contact personnel involved in evaluation of program objectives.

Learning Aid #4 Steps to take to advocate for program plan approval

- Distribute copies of the draft plan to staff.
- Discuss draft plan with key decision makers in the MOH.
- Reach consensus on the plan by convening symposiums or meetings.

Learning Aid #5

Key points of the workshop

- Program planning is a systematic process that is closely linked to policy development.
- Program plans need to be realistic. They need to be based on current epidemiological and management data, and they must be feasible to implement given the countries' level of resources.
- The various components of a national program plan may vary among countries. Standard components that should be present in all plans include (1) impact objectives and indicators; (2) outcome objectives and indicators; (3) an implementation plan that includes activities and tasks; (4) a monitoring plan; and (5) an evaluation plan.
- Program plans need to be shared and discussed with key decision makers in the MOH and other collaborating agencies before being submitted for approval by the minister of health and collaborating agencies.
- Program plans must be periodically reviewed and revised.

REFERENCES

1. Foster SO. Thirteen lessons learned: 1981-1993. African Child Survival Initiative-Combatting Childhood Communicable Diseases Project, ACSI-CCCD Catalogue Number 099-4006. Atlanta: Centers for Disease Control and Prevention, 1993.
2. Centers for Disease Control and Prevention. Controlling Malaria in Africa: Progress and Priorities. Atlanta: Centers for Disease Control and Prevention, 1993.
3. Vella J. Learning to teach: Training of trainers for community development. Washington DC: OEF International and Save the Children, 1989.

APPENDIX A: Sample Training Needs Assessment Questionnaire

Country: _____ Date: _____

Completed by: _____ Title: _____

Instructions:

The purpose of this questionnaire is to identify program managers' priorities and concerns on program planning and management topics. The results of this questionnaire can be used to adapt training materials for a workshop on program planning and management for malaria control.

I. Self-assessment of planning skills

Please rate your skills in the following planning areas by circling the appropriate response.

Good = you have done or can perform the activity or task indicated in a fully satisfactory manner

Moderate = you may be able to complete the activity or task

Weak = unable to complete the task satisfactorily with current experience and skills

- | | | | | |
|----|--|------|----------|------|
| 1. | Making the program plan reflect the goals stated in your national policy on malaria control. | Good | Moderate | Weak |
| 2. | Developing objectives on mortality and morbidity reduction. | Good | Moderate | Weak |
| 3. | Developing indicators to measure objectives on mortality and morbidity reduction. | Good | Moderate | Weak |
| 4. | Developing objectives on improving case management of patients. | Good | Moderate | Weak |

5.	Developing indicators to measure objectives on case management of patients.	Good	Moderate	Weak
6.	Identifying appropriate program activities and tasks that will lead to the achievement of objectives.	Good	Moderate	Weak
7.	Developing an implementation plan that identifies how the tasks will be conducted, the person(s) responsible, when the tasks will take place, and the resources needed.	Good	Moderate	Weak
8.	Developing a monitoring plan for each activity that identifies what tasks will be monitored, the methods to use, who is responsible for monitoring the task, and how often the task will be monitored.	Good	Moderate	Weak
9.	Developing an evaluation plan for each objective that identifies the method to use to measure indicators, the sources of data, and how often the indicators should be measured.	Good	Moderate	Weak

II. Priority areas for training

The following components are commonly included in a program plan for malaria control. Please rank each of the five planning components according to your priorities for training. Place a number from 1 to 5 next to each planning component, with 5 for most important, and 1 for least important.

- Program objectives = _____
- Indicators = _____
- Implementation plan = _____
- Monitoring plan = _____
- Evaluation plan = _____

III. Comments and Suggestions

Please write additional information on your skills in planning and your priorities for training in the space provided.

Please write any suggestions you have for a future workshop on program planning for malaria control.

APPENDIX B: Sample Final Workshop Questionnaire

Instructions:

The facilitators of the workshop would appreciate your time in completing a questionnaire on the workshop. The results of this questionnaire will help us to design future training activities and technical assistance. Your responses will remain anonymous. Please read each statement and circle the response that best reflects your opinion. There is space available for comments; please write in clear block letters.

The following code will be used to respond to questions 2 - 16.

Strongly disagree = 1
Disagree = 2
No opinion = 3
Agree = 4
Strongly agree = 5

1. Check the letter that best reflects your current professional status.

- _____ (a) Malaria Control Program Manager
- _____ (b) Director of Endemic Disease, Preventive Medicine
or Community Health Program or Project
- _____ (c) Other; please specify _____

Circle the number that best reflects your opinion - see code above

2. The purpose of the workshop is clearly related to my professional responsibilities. 1 2 3 4 5

3. Overall, the workshop was well organized. 1 2 3 4 5

- | | | | | | | |
|-----|---|---|---|---|---|---|
| 4. | Continuous evaluation activities (focus groups and large group feedback sessions) contributed to the workshop. | 1 | 2 | 3 | 4 | 5 |
| | | | | | | |
| 5. | The participatory learning methodology used during the workshop was an effective approach for teaching planning skills. | 1 | 2 | 3 | 4 | 5 |
| | | | | | | |
| 6. | Throughout the workshop, the examples given of program planning and the discussions that followed were pertinent to issues encountered in my country. | 1 | 2 | 3 | 4 | 5 |
| | | | | | | |
| 7. | The organization of the training sessions enhanced my understanding of the program planning process. | 1 | 2 | 3 | 4 | 5 |
| | | | | | | |
| 8. | Facilitators demonstrated both the technical knowledge and the training skills necessary to conduct an effective workshop on program planning. | 1 | 2 | 3 | 4 | 5 |
| | | | | | | |
| 9. | Facilitators actively engaged all participants in the sharing of ideas and experiences. | 1 | 2 | 3 | 4 | 5 |
| | | | | | | |
| 10. | The facilitators made their expectations of the participants explicit throughout the workshop. | 1 | 2 | 3 | 4 | 5 |

11. The sharing of problems and identification of practical solutions among African colleagues has resulted in a more appropriate program plan for my country.
- 1 2 3 4 5
12. The training materials (print and audio-visual) used throughout the workshop helped me to develop my program plan.
- 1 2 3 4 5
13. All the essential information necessary to the development of a good program plan was conveyed during the workshop.
- 1 2 3 4 5
14. This workshop increased my knowledge of program planning for malaria control.
- 1 2 3 4 5
15. I feel more confident in my ability to develop a program plan for malaria control due to my participation in this workshop.
Why or why not?
- 1 2 3 4 5
16. Gaining support for the program plan will be facilitated by the collaborative approach to planning adopted during this workshop.
Comments:
- 1 2 3 4 5

17. Comments about the process of the workshop:

18. Other benefits I have gained by participating in this workshop include:

19. Other comments:

APPENDIX C: Sample Post-Workshop Questionnaire

Representatives from the program planning workshop have been reviewing the program plans that you drafted during the workshop to identify areas where further assistance may be desirable. To make this assistance as useful to us and to your country as possible, please provide us with information in the following two areas:

1. Actions that have been taken since the workshop to refine your program plan and to gain approval of the plan
2. Remaining technical concerns for implementation of the plan that need to be addressed

The questionnaire should be completed by one of the workshop participants. If possible, the respondent should consult with other participants to ensure that responses reflect the views of all those who attended. Please provide detailed responses and use additional sheets if necessary. The information you provide will help us to identify how we can assist you in promoting the program planning process in your country. Your prompt response is appreciated.

Country _____ Date _____

Completed by _____

PART 1 ACTIONS TAKEN SINCE THE PROGRAM PLANNING WORKSHOP

Please check all responses that apply and record additional information as necessary.

1. I (we) have taken the following actions since my (our) return from the program planning workshop to advance the development of the plan for the national malaria control program.
 - Wrote a summary report of the workshop
 - Met with the other participants from the workshop and/or members of my staff to discuss how to finish developing the plan
 - Drafted a revised or new plan based on my work at the workshop

Obtained support for the new plan by discussing it with key decision makers

Submitted plan for approval by the minister of health

No action to date

Other actions taken:

PART II. TECHNICAL CONCERNS FOR IMPLEMENTATION OF PLAN

Type or print clearly.

1. Please describe any barriers you have encountered while finalizing your program plan.

Describe any actions you've taken to overcome these barriers.

2. For 199_, your priority malaria control activities for implementation are as follows:

(1) _____

(2) _____

(3) _____

3. For your priority activities, describe any technical assistance you need from the workshop trainers.

Thank you very much for taking the time to complete this questionnaire.

APPENDIX D: Guidelines For Conducting the Facility-Based Assessment

(Program Planning, Lesson Plan #4: Learning Aid #11)

Observations of Health Worker Performance in the Case Management of Febrile Children

Procedures

1. During a tour of the facility, determine the following:
 - The path mothers and children will follow during their visit to the clinic.
 - The different providers who will be treating febrile children during the time of observation.
 - The languages spoken by the mothers, and whether there is someone available to serve as an informal translator for mothers who do not speak the language of the clinicians.
2. While collecting data, try to ensure that your observations are distributed equally among all providers who are treating febrile children.
3. Write the facility name and date at the top of each observation and interview form. Number the forms sequentially from 1 to 10, and put this number on each page.
4. Ask the registration nurse to help you identify children who are under age 5 and who are at the clinic because they have a fever or recent (< 48 hours) history of fever (this can be based on the mother's report, the referral form, or the judgment of the registration nurse).

Begin observing with the first child who meets these two criteria. First, have the registrar ask the mother whether she will permit you to accompany her throughout her visit, and whether she agrees to participate in the exit interview. If the mother agrees, give her a numbered card that corresponds to the questionnaire number, and explain that you will be trying to follow the mother all the way through the case management process until she leaves the facility. Ask the mother to carry the numbered card with her throughout her clinic visit, so that she can be identified as a participant in the exercise.

Mark YES on your observation form for each action performed by the provider. If the clinic is arranged so that a single child will see several providers sequentially, follow the child and mother through the facility, marking all items that are performed by any one of the providers. If there are long waiting periods you can ask the mother or provider to inform you as they are taken in to see the provider.

5. When the case management process is over, walk with the mother to the place where other team members are interviewing mothers. Sit down for a moment and review the items you have checked YES to ensure they are accurate. Go back and circle NO for the remaining items (those that were NOT performed by the provider). When it is complete, hand the completed observation checklist to the team member who will interview the mother. Be sure to keep the observation and interview forms together.
6. Continue conducting observations until the team has observed a total of 10 children and interviewed their mothers or until 11 AM (if the exercise started at 8 AM). If you are not able to follow a mother and child all the way through their visit to the facility, or if an exit interview with the mother cannot be completed, select another child and repeat the observation process.
7. Once you have completed the observations, sit with other team members and review the data again to be sure they are complete and correct.

**Health Worker Performance in Managing a Child Under 5 Years
with History of Fever**

Date: _____

Observation number : _____ Health Facility : _____

Observer : _____ N° of health workers observed : _____

Did the health worker(s) determine

The age of the child?.....	YES	NO
The weight of the child?.....	YES	NO
The temperature with a thermometer?.....	YES	NO

Did the health worker(s) ask questions about

The duration of the fever?.....	YES	NO
Convulsions?.....	YES	NO
Diarrhea?.....	YES	NO
Vomiting?.....	YES	NO
Cough?.....	YES	NO
Treatment given before arriving at health center:		
given at a health facility?.....	YES	NO
given elsewhere?.....	YES	NO

Diagnosis (ask the health worker to tell you)

Malaria fever?.....	YES	NO
Pneumonia/Bronchitis?.....	YES	NO
Other? (specify) _____		

Treatment

Antimalarial prescribed?.....	YES	NO
-------------------------------	-----	----

Name of drug _____

In what form?

tablet [] syrup [] injection []

Is the dosage in accordance with national policy?.....	YES	NO
---	-----	----

Did the health worker(s) tell the mother

To give the treatment over 3 days?.....	YES	NO
To give aspirin/acetaminophen for high fever?.....	YES	NO
To give a warm sponge bath to reduce the fever?	YES	NO
To return to the health center - if the fever persists longer than 2 days?.....	YES	NO
- if the child vomits?.....	YES	NO

Did the health worker(s)

Ask questions of the mother to see if she understands how to give the home treatment...	YES	NO
Ask the mother if she has any questions.....	YES	NO

Exit Interviews with Mothers of Febrile Children

Procedures

1. During a tour of the facility, determine the following:
 - A location in the clinic that mothers and children will pass as they leave the facility, and where two interview posts can be established.
 - How mothers obtain drugs for their child – whether the provider's prescription is filled at the clinic, or whether the mothers are sent to a pharmacy.
2. Establish two quiet locations for exit interviews, and be sure that the team members who are conducting the observations know where the interview posts are located.
3. The team members conducting the observations will bring mothers to you after they have completed the observations. Introduce yourself to the mother. Tell her that you would like to ask her a few questions about her visit to the clinic today, and obtain her permission. (If she does not want to be interviewed at this time, inform the observers to replace her.)
4. Conduct the interview with the mother. Record all answers on the interview form.
5. Thank the mother for her assistance.
6. Continue conducting interviews until 10 pairs of observations and interviews are successfully completed or until 11 AM (if the exercise started at 8 o'clock).
7. Once you have completed the observations, sit with other team members and review the data again to be sure they are complete and correct.

Exit Interview of Mothers with Febrile Child

Health facility: _____ Date: _____

N° of observation: _____

Interviewer: _____ Language of the interview: _____

Have you received a drug for treating your child's fever?..... YES NO

Name of drug _____

In what form:

tablet [] syrup [] injection []

How will you administer this medicine to your child?

CORRECT RESPONSE?..... YES NO

Did the health worker

Explain to you what you should do for your child's fever?..... YES NO

How to treat your child?
(Don't prompt responses. Indicate if the mother states the following.)

- aspirin/acetaminophen.....	YES	NO
- warm sponge bath.....	YES	NO
- medicine over 3 days.....	YES	NO

Tell you when to return to the clinic?... YES NO

Under what conditions would you
return to the clinic?.....
(Do not suggest possible responses.
Indicate if the mother states the following.)

- fever lasts longer than 2 days.. YES NO
- vomiting YES NO

RESULTS:

Hospitalized []
Kept at the health facility for observation []
Referred []
Sent home []

Review of Clinic Records and Commodities

Procedures

1. During a tour of the facility, determine the following:
 - Where children and mothers are registered
 - Where stocks of drugs are stored
 - Where patient and clinic records are kept, and who is responsible for them
2. After meeting with the person in charge to explain the purpose of the exercise, ask if you can speak with him/her for a few moments after the other team members have begun data collection. Offer to make an appointment if that would be more convenient for the person in charge.
3. During the interview with the person in charge, explain that you will need help in answering a few questions and in locating the clinic stocks and records. Explain that you understand that there may be different people in charge of different aspects of clinic operations, and request help in identifying those people and in collecting the information you need. Repeat that this is a training exercise, and that the information will be used to help program managers understand how data on facility operations can be useful to them.
4. Conduct the interview/inventory. It is not necessary to follow the order of the questionnaire. Be sure that you actually see any equipment or drugs – a report by a staff member is not sufficient.
5. Continue collecting information until you have successfully completed the questionnaire or until 11 AM (if the exercise began at 8 o'clock).
6. Sit with other team members and review the data again to be sure they are complete and correct.

Review of Records, Drugs, and Supplies at the Health Facility

Date: _____

Reviewer: _____ Health Facility: _____

Available drugs and supplies

Thermometer?.....	YES	NO
Scales?.....	YES	NO
Health education materials on malaria?.....	YES	NO
Chloroquine tablets in stock?.....	YES	NO
Chloroquine syrup in stock?.....	YES	NO
Sulfadoxine/pyrimethamine tablets in stock?....	YES	NO
Sulfadoxine/pyrimethamine injectable in stock?.	YES	NO
Quinine syrup in stock?.....	YES	NO
Quinine injectable in stock?.....	YES	NO
Other antimalarials in stock?.....	YES	NO

Stock register

Is there a drug stock register?.....	YES	NO
Have entries been made in the register during the past week?.....	YES	NO

Documentation

Is there a patient register?.....	YES	NO
Presence of elements in register:		
Name of patient?.....	YES	NO
Age?.....	YES	NO
Symptoms?.....	YES	NO
Diagnosis?	YES	NO
Treatment?	YES	NO
Referral?	YES	NO
Is there a way to count the number of children less than 5 years of age who have come to the health facility during the past month?	YES	NO
If yes,		
Source of data: _____		
Number of children: _____		
Is there a way to count the number of children less than 5 years of age who had a fever confirmed by a health worker during the past month?..	YES	NO
If yes,		
Source of data: _____		
Number of children: _____		
Are there records on individual patients?.....	YES	NO

Patient Management Summary

Clinic name: _____ Dates covered: _____ to _____

Identify all children less than 5 years of age with a diagnosis of fever in the past month. For those children, complete the table below with the maximum amount of information available on each child. Use additional sheets, if necessary.

AGE	WEIGHT	DIAGNOSIS	TX ADVISED	TX GIVEN

(Program Planning Lesson Plan 4: Learning Aid #12)

Procedures for Conducting the FBA Survey/Guide for the Teams

Before the Visit

Course facilitators will have contacted the facilities to be visited in advance and obtained permission to conduct the survey.

1. Select a Team Coordinator (this person, who will also collect data, will be responsible for introducing the team at the facility and making final decisions on procedures).
2. Review the procedures that follow to be sure everyone is clear about their responsibilities.
3. Agree on where and when the team will meet, to ensure that team members will reach the facility no later than 7:15 AM.
4. Be sure the following materials are available:
 - 20 copies of the observation and interview questionnaires and 3 copies of the record review questionnaire
 - Pencils, sharpeners, erasers
 - Directions to the facility
 - One copy of the country's national policy for case management of fever
 - 10 small cards, numbered from 1 to 10

During the Visit

1. Upon arrival at the facility, the team coordinator should ask to see the person in charge. He/she will be expecting the team.
2. Hold a brief meeting with the person in charge. Review the following points:
 - Purpose of the field visit (i.e., to provide a training opportunity for workshop participants in how to assess case management at the facility level, and to gain experience in how data can help them plan their programs)
 - Introductions of team members
 - What you will need from the facility staff (e.g., permission to observe consultations, interview mothers and staff, and review available equipment, drugs and clinic records)

3. Ask the person in charge to give all team members a brief tour of the facility and to introduce the staff. During the tour, be sure to note the following:
 - Where mothers and children enter the facility, and how they will be registered
 - How many providers will be delivering care to febrile children
 - The locations of clinic records and stocks

At the conclusion of the tour, hold a brief team meeting and make the following decisions:

- Where the 2 observers will sit while waiting for incoming children with fever
- Where the interviews with exiting mothers will be conducted by the 2 interviewers
- When the commodities and record inventory will be conducted by the fifth team member

Discuss these decisions with the person in charge.

4. Team members responsible for each component of the assessment (observations, interviews with mothers, reviewing commodities and records) should collect data using the standardized procedures agreed upon in the workshop. Any problems should be referred to the team coordinator.
5. At 11 AM, or earlier if you complete your data collection responsibilities, STOP collecting data.
6. Meet with other team members in a quiet place in the facility and review all the completed forms. Any omissions or errors should be corrected at this time. If necessary, return to clinic staff members to ask their assistance in completing missing items.
7. Thank the staff. Repeat that this exercise was for training purposes only, and that no official report will be issued.

REMEMBER!

- TRY NOT TO DISTURB CLINIC OPERATIONS.
- DO NOT PROVIDE FEEDBACK TO CLINIC STAFF UNLESS YOU OBSERVE AN ACTIVITY DIRECTLY THREATENING THE LIFE OF THE PATIENT.
- THE TEAM COORDINATOR SHOULD WRITE DOWN ANY PROCEDURES THAT DEVIATE FROM THE INSTRUCTIONS.

After the Visit

1. Team members responsible for each component of the assessment should summarize their data using a blank questionnaire form. For example,
 - The observers should count the number of children who were weighed, and write the total number of YES responses on the form, and the total number of NO responses on the form.
 - The interviewers should add up the total number of mothers who respond "YES" and "NO" to each question and write them on form.
 - The team member who conducted the inventory only needs to summarize the data abstracted from patient records, by counting the number of children for whom age, weight and diagnosis data were available, and how many of the prescriptions or treatments for fever are in accordance with the national policy.

You should complete this summary before the afternoon session begins.

(Program Planning, Lesson Plan #4: Learning Aid #14)

Guidelines for summarizing and presenting field trip data

The purpose of these guidelines is to state the steps to take to summarize the data and present it in graphs.

SUMMARIZE YOUR DATA

For each of the groups:

1. Count the total number of observations, interviews, or facilities visited by all teams. Develop tables for the data entry (sample formats of tables are provided at the end of these instructions). Enter the number at the top of the table. This is your "N," the total sample size.

The observation group will need to prepare two tables (#1 and #2): one for data on all children with a history of fever; and one only for those children diagnosed by the health provider as having a malaria fever. This is because items on treatment and education of the mother will apply only to those children whom the provider has diagnosed with fever. In the second table, the "N" will be the total number of children diagnosed with malaria fever.

2. For each item on your questionnaire, count the total number of "YES" responses from all teams and enter in the "YES" column. Count the total number of "NO" responses from all teams and enter in the "NO" column. If one or more questionnaires are blank for a specific questionnaire item, put the number of blank questionnaires from all teams in the "MISSING" column.
3. Add the "YES" and "NO" columns together. This is your denominator. Divide the total number of "YES" responses by this denominator to obtain a valid percent of "YES" responses. A valid percent refers to the percentage after the missing data have been omitted from the total sample size in the denominator. The formula is:

$$\frac{\text{Number "YES"}}{\text{Number ("YES" + "NO")}} \times 100$$

4. Enter the valid percent "YES" in the appropriate column.
5. For questions that apply only when the answer to the previous question was "YES", enter the total number of "YES" responses to the previous question in the space for the subsample (n=). Calculate the valid percent "YES" using the procedures described above.
6. Calculate percentages for each item on your questionnaire.

GRAPH THE DATA

1. Select three or four items from your survey to present in a graph.
2. Write short labels for each of these items along the bottom of your table. Use more than one graph if necessary, so that the items are not crowded.
3. Draw a bar that represents the valid percent for each survey question. Write the percentage on the top of the bar.
4. Label the "Y" axis (the left hand border of the graph) by filling in whether your data are observations, interviews with mothers, or facilities. List the total sample size (N).
5. Develop a title for your graph and write it at the top of the page. Graph titles should include ALL the information necessary to interpret the data correctly. This information should include the following:
 - WHAT is being presented (e.g. Case management of febrile children, Information provided to mothers of febrile children, Mothers' knowledge about how to administer treatment for their children with fever, Availability of antimalarials in selected facilities, etc.).
 - The SAMPLE from which the data have been collected (e.g., Febrile children presenting for care in a non-random sample of urban facilities).
 - WHERE the data were collected (e.g., Abidjan, Cote d'Ivoire).
 - WHEN the data were collected (e.g., May 1992).
5. Review the final graph for clarity and completeness. Develop a brief presentation (no more than five minutes) describing the methods and results of this aspect of the field survey.

Table 1. Observations of health worker practices

**PERFORMANCE OF HEALTH WORKERS IN THE DIAGNOSIS
OF FEBRILE CHILDREN**

(N = ____ children)

ITEM	"YES"	"NO"	MISSING	VALID % "YES"
Did the health worker determine				
The age of the child?				
The weight of the child?				
The temperature of the child with a thermometer?				
Did the health worker ask questions on				
Duration of the fever?				
Convulsions?				
Diarrhea?				
Vomiting?				
Cough?				
Treatment given prior to arriving at health facility?				
Treatment given at a health facility?				
Treatment found elsewhere?				

Table 2: Observations of health worker practices

TREATMENT AND PATIENT EDUCATION PRACTICES OF HEALTH WORKERS FOR CHILDREN DIAGNOSED WITH FEVER

(N = _____ febrile children)

ITEM	"YES"	"NO"	MISSING	VALID % "YES"
Treatment				
Antimalarial prescribed?				
Correct dose?				
Did the health worker explain to the mother:				
The correct number of treatment days?				
Give antipyretic for high fever?				
Give a warm sponge bath to reduce fever?				
Return to the health facility of fever persists more than 2 days?				
Return to the health facility if child vomits?				
Did the health worker				
Ask questions to the mother to ascertain if she understands the instructions given?				
Ask the mother if she has any questions?				

Table 3: Exit interviews of mothers

REPORTS OF HEALTH EDUCATION MESSAGES GIVEN BY THE HEALTH WORKER AND KNOWLEDGE OF MOTHERS ON TREATMENT OF FEBRILE CHILDREN AT THE TIME OF EXIT

(N = _____ mothers)

ITEM	"YES"	"NO"	MISSING	VALID % "YES"
Did you receive any antimalarials to treat your child's fever?				
Did the health worker				
Explain to you how to administer the drugs to your child?				
Explain to you how to care for your child's fever?				
Mothers' responses:				
The correct number of days of treatment				
Give an antipyretic				
Give a tepid sponge bath				
Return to clinic if fever persists more than 2 days				
Return to clinic if child vomits				
Return to clinic if fever worsens				

Table 4: Record review

**AVAILABILITY OF DRUGS AND SUPPLIES AND REVIEW OF RECORDS FOR
CASE MANAGEMENT OF FEBRILE CHILDREN**

(N = ____ health facilities)

ITEM	"YES"	"NO"	MISSING	VALID % "YES"
Materials and medicine present				
Thermometer?				
Scales?				
Health education materials on malaria?				
Chloroquine tablets in stock?				
Chloroquine syrup in stock?				
Sulfadoxine/pyrimethamine tablets in stock?				
Sulfadoxine/pyrimethamine injectables in stock?				
Quinine tablets in stock?				
Quinine injectables in stock?				
Other antimalarials in stock?				
Antipyretic in stock?				
Stock register				
Register of stock present?				
Entries for last week?				

ITEM	"YES"	"NO"	MISSING	VALID % "YES"
Record-keeping				
Records for current patients?				
If yes, elements present:				
Name?				
Age?				
Symptoms?				
Diagnosis?				
Treatment?				
Referral?				
Is there a way to count the number of children less than 5 years of age who arrive at the health facility with a fever in the last month?				
Is there a way to count the number of children less than 5 years of age who had their fever confirmed by a health worker in the last month?				
Are records on individual patients kept?				