Step 7: Monitor and Evaluate the Program

describes how to monitor and evaluate your program on an ongoing basis. It emphasizes the utilization of data derived from the M&E framework developed in Step 3 as a tool for managing and improving the program. The way to evaluate the program formally is also explained.

Objective

- To implement the M&E plan
- To utilize M&E data for ongoing program management and improvement
- To organize formal evaluations of the program again for management purposes and for presentation of outcomes to other stakeholders
Implement the M&E Plan

In Step 3 you developed an M&E framework and an associated plan for your program. During the early implementation phase, you will also have trained all relevant personnel on the plan and on their responsibilities with regard to data collection. Once the program is underway, you should begin to collect M&E performance indicators according to the plan as soon as possible. The M&E officer or other designated individual should coordinate the data collection and should initiate analysis of the data, again in accordance with the plan. Ideally data should be analyzed monthly in order to have an ongoing picture of how the program is progressing. It is important at this early stage to emphasize to all the need for rigorous data collection. For some personnel this may be an unfamiliar task. It is, therefore, equally important to have put in place the quality assurance measures which will allow the M&E officer to check on the completeness and accuracy of the data.

The M&E officer, project manager or other responsible persons should review the analyzed data and disseminate the results to personnel in accordance with the plan. Significant changes in performance indicators or deviations from the expected outcomes should prompt careful investigation. This is the value of M&E in terms of program management and improvement. Investigation may reveal the cause of change or deviation from expected outcomes, leading to the appropriate corrective and preventative action. Corrective action means taking measures to address the issues identified, while preventative action implies putting in place measures to prevent recurrence of the problem or a related problem. Field Stories 7.1 and 7.2 give examples of how M&E data can be utilized for these purposes. These field stories are fictitious.

If you have established the performance indicators well, you will thus be able to detect at an early stage significant deviations from the expected results which would ultimately lead to not achieving the defined objectives of the program. You should for example be able to detect whether the desired levels of efficacy with ARV therapy are being obtained by ongoing review of data on VL, CD4, opportunistic infections etc. The effectiveness of training programs you put in place can be assessed by collecting data on how well the trainees have assimilated and put into practice their new knowledge. This could be done by formal exams and by systematic observation of the trainees by experienced personnel. Note that these types of performance indicators are not simple outputs (e.g., the number of people trained), but they are outcomes which address the quality of the activities of the program. It is these types of indicators which are most useful in identifying problems in your program and in deciding how to take the appropriate corrective and preventative action.

As the program matures and personnel become more familiar with M&E data and their utilization, the benefits of collecting such data will become clear. This should further facilitate data collection.

Field Story 7.1. Example of Use of M&E Data to Investigate Program Issues

A new center for care and treatment opens in X, South Africa in July 2008. The M&E program framework requires that adherence be measured by pill counts. A target level of adherence has been set at > 95%. In October, after 3 months, according to the framework schedule, the M&E officer reviews adherence results and notes that 84% of the children are at >95%. This is reported to the team and all consider it a splendid result. The patient population is growing rapidly and new staff recruits are being brought on board equally quickly. At the end of the second 3 months, the M&E officer notes that only 72% of children are now reaching >95% adherence. He conducts an investigation.

Since this was likely to be a systemic as opposed to individual patient issue, the M&E officer begins his investigation at the pharmacy. A new pharmacist was hired about 2 and a half months after the center opened. The officer discovers that the new pharmacist has been using an incorrect equation to calculate adherence. Instead of ingested/prescribed, he has been calculating ingested/dispensed, leading to underestimation of adherence by up to 7% for each child, because each dispensed bottle of medication contains two extra days dosing.

The appropriate corrective action is instituted and the pharmacist undergoes training. Preventative action is also put in place: namely training of all future new hires on the adherence calculation and prominent display of the correct adherence calculation on a poster on the pharmacy wall.
Field Story 7.2. Example of Use of M&E Data to Investigate Program Issues

At the same new center described in Field story 7.1, in January 2009 at the end of the second 3 months, the M&E officer discovers that adherence has improved only marginally; by an average of 5% overall. At the pharmacy he verifies that the correct calculation is now being used. He finds no other obvious cause and decides to review patient charts. As one might expect under normal circumstances, there is a group of patients who adhere well and a group who do not. He can discern no pattern until he asks one of the nurses to look with him. The nurse knows the patients well and notes with interest that the patients doing well, tend to have parents who speak Afrikaans.

The M&E officer checks the C.V. of the pharmacist, where it is stated that he speaks English, Afrikaans and Zulu. The following day he goes to the pharmacy to observe and notes that the pharmacist only uses Afrikaans when talking with the parents of children patients. After a few questions it becomes evident that the pharmacist cannot speak Zulu. A sample of parents leaving the pharmacy is interviewed and it is confirmed that those who do not speak Afrikaans have limited understanding about the medications and how to administer them. The corrective action is to place a nurse who can speak Zulu in the pharmacy to translate for the pharmacist and to reevaluate the language skills of all COE personnel. The preventative action is to require proof of knowledge of Zulu for all future new hires for whom it is considered essential.

Evaluating the Program

As the program progresses, you will reach the times at which episodic evaluations should take place. Table 7.1 is a simple tool, (with illustrative examples) which you can utilize to plan such evaluations, their purpose, the data required for them, the responsible persons and the subsequent dissemination of results.

Table 7.1: Evaluation planning tool

<table>
<thead>
<tr>
<th>Evaluation date</th>
<th>Evaluation purpose</th>
<th>Data to be analyzed</th>
<th>Responsible persons</th>
<th>Report dissemination</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 2007</td>
<td>Patient outcomes and service delivery</td>
<td>Patient chart data Patient survey responses</td>
<td>M&amp;E Team</td>
<td>Program management Funders Government partners</td>
</tr>
</tbody>
</table>

An important element of the M&E plan, only briefly referred to in Step 3, is to define what evaluative questions of interest can be answered through M&E activities. M&E questions provide insight into the design of the program, assess progress made towards program objectives, and answer some “why” questions related to (lack of) changes in the behavior of the target groups or manifestation of unexpected results, for example. Data collected through M&E activities will be used to highlight successful strategies, model practices that can be replicated, and inform others about lessons learnt.

Information is also used to determine if planned program objectives are achieved or not, if target populations have been reached and the desired quality of services provided has been reached. Such questions may prompt a modification in the program approach or can lead the program management into new areas where intervention is needed. The data collection can also be sufficiently rigorous to answer operational research questions.

The mid-term and end evaluations will be based on the routine monitoring data collected during the course of the program. The purpose of mid-term evaluations is usually to determine if the program is on track and progress is being made towards the planned objectives. These evaluations can also examine questions related to program, information, and resource management; can seek feedback from all stakeholders on the implementation process and any problems encountered; can analyze programmatic success based on collected data; can identify best practices and lessons learnt; and can ultimately be the basis for providing recommendations. End evaluations seek to answer similar questions but also look at how the sites have implemented the recommendations of the mid-term evaluations and what effect the changes have had on program results.

The evaluation reports can be disseminated to external stakeholders as well, such as the government, funders and other partners.
Here are some examples of key evaluation questions:

- **Relevance** - Was/is the project a good idea given the situation to improve? Was the logic of the project correct? Why or Why Not?
- **Effectiveness** - Have the planned results been achieved? Why or Why Not?
- **Efficiency** - Have resources been used in the best possible way? Why or Why Not?
- **Sustainability** - Will there be continued positive impacts as a result of the project once it has finished? Why or Why Not?
- **Impact** - To what extent has the project contributed towards its longer term goals? Why or Why Not? Have there been any unanticipated positive or negative consequences of the project? Why did they arise?

### Updating the M&E Plan

The M&E framework plan should be reviewed and updated at least annually. It is important to remember that the M&E framework and plan are not set in stone. As the program progresses, the M&E data collected may indicate that some assumptions made during the planning phase might have been incorrect or that certain targets and objectives are really not obtainable with the given resources. When this occurs, appropriate modifications can be made. It is important, however, for reasons of transparency to document these changes and the rationale for them.

Timely review of M&E data, with appropriate corrective and preventive action thereafter, will help ensure the best clinical outcomes for your patients.

### Lessons Learned

- Use the data derived from M&E to improve your program, not just to show donors how successful the program is.
- When problems are discovered from M&E data, institute corrective and preventative action in order to correct as far as possible the problem identified and to prevent the same problem occurring again in the future.