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PERFORMANCE MONITORING & EVALUATION

TIPS

USING DIRECT OBSERVATION TECHNIQUES

ABOUT TIPS

These TIPS provide practical advice and suggestions to USAID managers on issues related to performance monitoring and evaluation. This publication is a supplemental reference to the Automated Directive Service (ADS) Chapter 203.

USAID's reengineering guidance encourages the use of rapid, low cost methods for collecting information on the performance of our development activities.

Direct observation, the subject of this TIPS, is one such method.

WHAT IS DIRECT OBSERVATION ?

Most evaluation teams conduct some fieldwork, observing what's actually going on at assistance activity sites. Often this is done informally, without much thought to the quality of data collection. Direct observation techniques allow for a more systematic, structured process, using well-designed observation record forms.

ADVANTAGES AND LIMITATIONS

The main advantage of direct observation is that an event, institution, facility, or process can be studied in its natural setting, thereby providing a richer understanding of the subject.

For example, an evaluation team that visits microenterprises is likely to better understand their nature, problems, and successes after directly observing their products, technologies, employees, and processes, than by relying solely on documents or key informant inteviews. Another advantage is that it may reveal conditions, problems, or patterns that many informants may be unaware of or unable to describe adequately.

On the negative side, direct observation is susceptible to observer bias. The very act of observation also can affect the behavior being studied.

WHEN IS DIRECT OBSERVATION USEFUL?

Direct observation may be useful:

- When performance monitoring data indicate results are not being accomplished as planned, and when implementation problems are suspected, but not understood. Direct observation can help identify whether the process is poorly implemented or required inputs are absent.
- When details of an activity's process need to be assessed, such as whether tasks are being implementing according to standards required for effectiveness.
- When an inventory of physical facilities and inputs is needed and is not available from existing sources.
- When interview methods are unlikely to elicit needed information accurately or reliably, either because the respondents don't know or may be reluctant to say.

STEPS IN USING DIRECT OBSERVATION

The quality of direct observation can be improved by following these steps.

Step 1. Determine the focus

Because of typical time and resource constraints, direct observation has to be selective, looking at a few activities, events, or phenomena that are central to the evaluation questions.

For example, suppose an evaluation team intends to study a few health clinics providing immunization services for children. Obviously, the team can assess a variety of areas—physical facilities and surroundings, immunization activities of health workers, recordkeeping and managerial services, and community interactions. The team should narrow its focus to one or two areas likely to generate the most useful information and insights.

Next, break down each activity, event, or phenomenon into subcomponents. For example, if the team decides to look at immunization activities of health workers, prepare a list of the tasks to observe, such as preparation of vaccine, consultation with mothers, and vaccine administration.

Each task may be further divided into subtasks; for example, administering vaccine likely includes preparing the recommended doses, using the correct administration technique, using sterile syringes, and protecting vaccine from heat and light during use.

If the team also wants to assess physical facilities and surroundings, it will prepare an inventory of items to be observed.

Step 2. Develop direct observation forms

The observation record form should list the items to be observed and provide spaces to record observations. These forms are similar to survey questionnaires, but investigators record their own observations, not respondents' answers.

Observation record forms help standardize the observation process and ensure that all important items are covered. They also facilitate better aggregation of data gathered from various sites or by various investigators. An excerpt from a direct observation form used in a study of primary health care in the Philippines provides an illustration in Box 1.

When preparing direct observation forms, consider the following:

1. Identify in advance the possible response categories for each item, so that the observer can answer with a simple yes or no, or by checking the appropriate answer. Closed response categories help minimize observer variation, and therefore improve the quality of data.

2. Limit the number of items in a form. Forms should normally not exceed 40–50 items. If necessary, it is better to use two or more smaller forms than a single large one that runs several pages.

3. Provide adequate space to record additional observations for which response categories were not determined.

4. Use of computer software designed to create forms can be very helpful. It facilitates a neat, unconfusing form that can be easily completed.

Box 1.

OBSERVATION OF GROWTH MONITORING SESSION

Name of the Observer
Date
Time
Place

Was the scale set to 0 at the beginning of the growth session?

Yes_____ No _____

How was age determined?

By asking_____
From growth chart_____
Other_____

When the child was weighed, was it stripped to practical limit?

Yes_____ No_____

Was the weight read correctly?

Yes_____No_____

Process by which weight and age transferred to record

Health Worker wrote it_____
Someone else wrote it_____
Other_____

Did Health Worker interpret results for the mother?

Yes_____No_____

Step 3. Select the sites

Once the forms are ready, the next step is to decide where the observations will be carried out and whether it will be based on one or more sites.

A single site observation may be justified if a site can be treated as a typical case or if it is unique. Consider a situation in which all five agricultural extension centers established by an assistance activity have not been performing well. Here, observation at a single site may be justified as a typical case. A single site observation may also be justified when the case is unique; for example, if only one of five centers had been having major problems, and the purpose of the evaluation is trying to discover why. However, single site observations should be avoided generally, because cases the team assumes to be typical or unique may not be. As a rule, several sites are necessary to obtain a reasonable understanding of a situation.

In most cases, teams select sites based on experts' advice. The investigator develops criteria for selecting sites, then relies on the judgment of knowledgeable people. For example, if a team evaluating a family planning project decides to observe three clinics—one highly successful, one moderately successful, and one struggling—it may request USAID staff, local experts, or other informants to suggest a few clinics for each category. The team will then choose three after examining their recommendations. Using more than one expert reduces individual bias in selection.

Alternatively, sites can be selected based on data from performance monitoring. For example, activity sites (clinics, schools, credit institutions) can be ranked from best to worst based on performance measures, and then a sample drawn from them.

Step 4. Decide on the best timing

Timing is critical in direct observation, especially when events are to be observed as they occur. Wrong timing can distort findings. For example, rural credit organizations receive most loan applications during the planting season, when farmers wish to purchase agricultural inputs. If credit institutions are observed during the nonplanting season, an inaccurate picture of loan processing may result.

People and organizations follow daily routines associated with set times. For example, credit institutions may accept loan applications in the morning; farmers in tropical climates may go to their fields early in the morning and return home by noon. Observation periods should reflect work rhythms.

Step 5. Conduct the field observation

Establish rapport. Before embarking on direct observation, a certain level of rapport should be established with the people, community, or organization to be studied. The presence of outside observers, especially if officials or experts, may generate some anxiety among those being observed. Often informal, friendly conversations can reduce anxiety levels.

Also, let them know the purpose of the observation is not to report on individuals' performance, but to find out what kind of problems in general are being encountered.

Allow sufficient time for direct observation. Brief visits can be deceptive, partly because people tend to behave differently in the presence of observers. It is not uncommon, for example, for health workers to become more caring or for extension workers to be more persuasive when being watched. However, if observers stay for relatively longer periods, people become less self-conscious and gradually start behaving naturally. It is essential to stay at least two or three days on a site to gather valid, reliable data.

Use a team approach. If possible, two observers should observe together. A team can develop more comprehensive, higher quality data, and avoid individual bias.

Train observers. If many sites are to be observed, non-experts can be trained as observers, especially if observation forms are clear, straightforward, and mostly closed-ended.

Step 6. Complete forms

Take notes as inconspicuously as possible. The best time for recording is during observation. However, this is not always feasible because it may make some people self-conscious or disturb the situation. In these cases, recording should take place as soon as possible after observation.

Step 7. Analyze the data

Data from closed-ended questions from the observation form can be analyzed using basic procedures such as frequency counts and cross-tabulations. Statistical software packages such as SAS or SPSS facilitate such statistical analysis and data display.

Analysis of any open-ended interview questions can also provide extra richness of understanding and insights. Here, use of database management software with text storage capabilities, such as dBase, can be useful.

Step 8. Check for reliability and validity

Direct observation techniques are susceptible to error and bias that can affect reliability and validity. These can be minimized by following some of the procedures suggested, such as checking the representativeness of the sample of sites selected; using closed-ended, unambiguous response categories on the observation forms, recording observations promptly, and using teams of observers at each site.

Box 2. Direct Observation of Primary Health Care Services in the Philippines

An example of structured direct observation was an effort to identify deficiencies in the primary health care system in the Philippines. It was part of a larger, multicountry research project, the Primary Health Care Operations Research Project (PRICOR). The evaluators prepared direct observation forms covering the activities, tasks, and subtasks health workers must carry out in health clinics to accomplish clinical objectives. These forms were closed-ended and in most cases observations could simply be checked to save time. The team looked at 18 health units from a "typical" province, including samples of units that were high, medium, and low performers in terms of key child survival outcome indicators.

The evaluation team identified and quantified many problems that required immediate government attention. For example, in 40 percent of the cases where follow up treatment was required at home, health workers failed to tell mothers the timing and amount of medication required. In 90 percent of cases, health workers failed to explain to mothers the results of child weighing and growth plotting, thus missing the opportunity to involve mothers in the nutritional care of their child. Moreover, numerous errors were made in weighing and plotting.

This case illustrates that use of closed-ended observation instruments promotes the reliability and consistency of data. The findings are thus more credible and likely to influence program managers to make needed improvements.

Selected Further Reading

Information in this TIPS is based on "Rapid Data

Collection Methods for Field Assessments" by Krishna Kumar, in Team Planning Notebook for Field-Based Program Assessments (USAID PPC/CDIE, 1991).

For more on direct observation techniques applied to the Philippines health care system, see Stewart N. Blumenfeld, Manuel Roxas, and Maricor de los Santos, "Systematic Observation in the Analysis of Primary Health Care Services," in Rapid Appraisal Methods, edited by Krishna Kumar (The World Bank:1993)