

Data Demand and Information Use in the Health Sector

Strategies and Tools

MEASURE Evaluation

www.cpc.unc.edu/measure

Acknowledgments

The Data Demand and Information Use in the Health Sector toolkit is the result of collaboration between several MEASURE Evaluation staff members, especially Karen Foreit, Scott Moreland and Anne LaFond. Other contributors include Karen Hardee, Alan Johnston, Shannon Salentine, Philip Setel, Ilene Speizer, Minki Chatterji, Chuck Pill, and Bill Winfrey.

About MEASURE Evaluation

MEASURE Evaluation works to strengthen the capacity of host-country programs to collect and use population and health data.

As a key component of the Monitoring and Evaluation to Assess and Use Results (MEASURE) framework of the United States Agency for International Development (USAID), we work closely with USAID missions to promote a cycle of data demand, collection, analysis and use to measure progress toward addressing and confronting disease, population issues, and poverty.

We help health ministries, district caregivers, and local trainees successfully manage data for better informed program planning and policy-making. Our guidance and technical innovations empower our partners to improve family planning, maternal and child health, and nutrition programs and to confront HIV/AIDS, STDs and other infectious diseases worldwide.

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Strategies and Tools for Data Demand and Information Use in the Health Sector

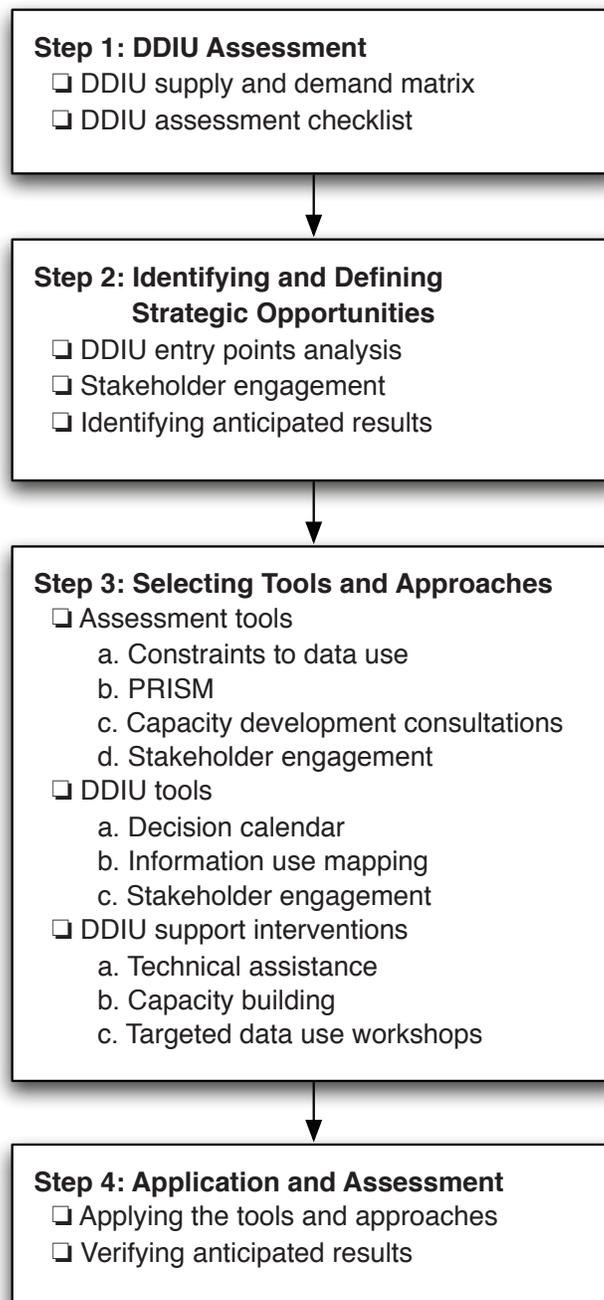
In Part 1 of this series, A Conceptual Framework for Data Demand and Information Use in the Health Sector, we provided a conceptual framework for evidence-based decision making in the public health arena. Part 1 addressed four topics: First, we presented the cycle of data collection-analysis-availability and information use. Second, we presented three “determinants” of data demand and information use (DDIU): technical, systems and individual. Third, we discussed DDIU in the context of program stages or decisions. Lastly, we presented a two-axis ‘data supply and information demand’ matrix intended for application at the country or program level. The purpose of the matrix is to provide an insight into the strategic entry-points for DDIU interventions.

Part 2 of this series, Strategies and Tools for Data Demand and Information Use in the Health Sector, continues where Part 1 left off and provides detailed strategies and tools for taking concrete next steps in implementing DDIU activities. Part 3 of the series will demonstrate ways in which DDIU accomplishments and lessons learned should be documented and how they can serve as further inputs into the DDIU cycle.

In this document we will first outline the steps for designing and implementing a DDIU approach. We will review the application of the information supply and demand matrix that was presented in Part 1. Next, we examine in more detail the constraints to evidence-based decision making, and how to identify and address some of the main constraints. In addition, we will examine strategies to encourage DDIU and guidelines for implementing DDIU activities and interventions. Lastly, we will present a set of tools for facilitating DDIU including the Decision Calendar, Assessment of Constraints to Data Use, Information Use Mapping, Stakeholder Engagement, and PRISM Tools.

Steps in Facilitating DDIU

There are four distinct steps in facilitating data demand and information use. These are shown in Figure 1 on the next page and are discussed in more detail in the sections that follow. Step 1 is to perform a DDIU assessment using a tool described in the next section. Step 2 is to use the information from Step 1 to identify and define strategic opportunities in terms of the entry point of DDIU activity, beneficiaries and stakeholders, and anticipated results. The third step is to select the DDIU tools and approaches to be applied and, finally, the fourth step is to use those tools and approaches and to document the impact of the DDIU activities in terms of the anticipated results from Step 2.

Figure 1. Steps in the DDIU process.

Step 1: DDIU assessment

In order to begin developing a DDIU strategy and identifying supporting interventions, it is useful to assess the current situation. The supply-and-demand construct presented in Part 1 places countries into one of four quadrants in Table 1, below.

Table 1. Joint classification of data supply and data demand/information use

| | | Data | |
|---------------------------------|----------------|---|---|
| | | Weak ← | → Improving |
| Data demand/ Information use | Weak ↑ | 1. Statistics and other sources of evidence are weak, and policymakers and program managers make little use of them. Evidence-based program- and policymaking are not practiced. | 2. The quantity and quality of statistics and other sources of evidence are improving, but they are not used for decision making because policymakers and program managers lack the incentives and/or the capacity to utilize them. |
| | Improving ↓ | 3. Statistics and other sources of evidence are weak but are increasingly used by policymakers and program managers for a variety of purposes. Data deficiencies reduce the quality of decision making. | 4. Statistics and other sources of evidence are improving and are being increasingly used for decision making. This results in better policy and program design and implementation. |

Adapted from Scott (2005).

How do we determine into which quadrant a country or situation falls? One way is to see how strong or weak the situation is with regard to technical, individual and organizational-level determinants. These three determinants, though, can be applied on either the supply or the demand side, or both.

In Table 2 on the next page, we present a checklist for the rapid appraisal of where a particular situation may fall. The questions listed in Table 2 are suggestive and not meant to be exhaustive. Judging if a country or situation is ‘weak’ or ‘improving’ is, of course, subjective. One might decide, for example, that if the majority of answers are “yes” for a specific area (say, technical constraints and supply), then it is improving, and if the majority of answers is “no” then it is weak.

More importantly, the checklist will help with targeting which DDIU determinants area may require the most attention. The responses to these questions will also help with deciding which DDIU tool to use. Hence, if the technical demand quadrant is judged to be weak, then capacity development and technical assistance in use of data and information would be important. If the organizational supply side is weak, then efforts should be directed to addressing the weak points in that area. For example, data quality norms may be missing, not understood or not used so that technical assistance may be warranted to ensure that data quality assurance norms are implemented.

Table 2. Checklist for a DDIU Assessment

| Possible constraints | Data Demand and Use | Supply: Data Collection and Availability |
|-------------------------|---|---|
| Technical | Do users understand data analysis? | Are data collection systems functioning well? |
| | Do users know what data they want? | Is there human resource capacity to analyze data? |
| | Are goals and objectives articulated in data terms? | Are there any data processing constraints? |
| Organizational | Are organizational goals linked to quantifiable results? | Are there communications constraints to acquiring data in a timely fashion? |
| | Do budgets include funding for M&E activities? | Are there organizational conflicts that impede data collection or sharing? |
| | Are there overarching political considerations that impede the use of information by public health decision makers? | Are there adequate communications channels for data dissemination? |
| | Are all stakeholders allowed access to data? | Are data quality norms established and enforced? |
| | Are there clear roles and responsibilities defined for information use? | Are data flow channels clear and followed? |
| Behavioral / Individual | Do stakeholders value data and information when making decisions? | Do public health staff have adequate time available to collect and/or analyze data and information? |
| | Are public health staff motivated to use data and information? Are there disincentives for such use? | Are public health staff adequately trained in data collection and analysis? |
| | Do stakeholders appreciate the value of information in identifying problems? | Will information sharing lead to lack of promotion or job loss? |

Step 2: Identifying and defining strategic opportunities

The DDIU assessment outlined above will identify certain areas for capacity building and technical assistance that will assist with improving the demand for and use of data and information. An important next step is to determine the “point of entry.” Since DDIU involves facilitating evidence-based decision making, it must also be determined what decisions, what data and what stakeholders are involved. What the DDIU approach will be in a particular context will largely depend on the initial situation and a broadly defined scope. Is the activity focused on routine health information systems or on enhancing use of a specific type of monitoring and evaluation data set or research finding? Or is the activity focused

on a particular problem, or issue or set of decisions that need to be made? Is the activity focused on a national level information system, or on improving information use at the district, facility or community level? Is there a group or class of stakeholders who may require DDIU skills? In some cases, a country or an organization will have made a significant investment in a data collection or M&E system, and will want to ensure that maximum use is made of the data and information generated by the system.

“Entry points” and “domains” are needed to focus the DDIU strategy development process. In Part 1, we looked at four program stages of (1) problem identification and recognition, (2) selection of the response, (3) implementation and program monitoring and, finally, (4) evaluation. We also looked at the decisions, data requirements and stakeholders and decision makers that might be involved at each of the four stages. For assisting with DDIU, any of the cells in Table 3, below, could serve as “entry points” for a DDIU intervention strategy. However, whichever cell serves as the entry point, we would expect that the DDIU strategy would involve the other cells in the same row. The “domain” is the row or rows that correspond with the program or decision stage.

Problem identification and recognition (row one) An example for a DDIU activity with this row as its domain may involve a stakeholder group (e.g. an NGO) that deals with adolescent girls at potential risk of sexual abuse or pregnancy. The stakeholder group may believe that there is a heightened risk of sexual abuse to secondary school girls in school settings. The entry point in this case is the NGO. Data or information would be needed to assess the extent of the problem, to document it and to raise awareness among school officials or the ministry of education to implement safeguards. The DDIU activity would be to facilitate the collection of relevant data and information for the NGO and to assist the NGO to present the information in an advocacy campaign to the ministry of education. The DDIU activity should also include capacity building for the NGO in the interpretation of the information and in presentation techniques.

Table 3. Program stages as entry points for DDIU

| Stage | Decisions | Type of Data Needed | Stakeholders |
|--|-----------|---------------------|--------------|
| 1. Problem identification and recognition | | | |
| 2. Selection of the response | | | |
| 3. Implementation and program monitoring | | | |
| 4. Evaluation | | | |

Selection of the response (row two) An example for this row may be the design of a strategy for increasing family planning use for those women who do not want any more children. In this case the entry point is the decision around a strategy to encourage contraceptive use that is appropriate for women in this category. Data that suggested which methods were appropriate and information about the costs and other resource requirements would be needed. Such data may come from various sources, including household surveys such as the Demographic and Health Surveys (DHS), evaluations, and operations research studies, etc. The stakeholders might be program planners in the ministry of health or a large donor contemplating funding a program in this area, as well as women's groups. The DDIU activity may be to facilitate the use of the appropriate data, assistance with its interpretation by the stakeholders, and development of a concrete plan of action.

Implementation and program monitoring (row three) An example for a DDIU intervention in row three would be the development and use of a program monitoring plan for a newly launched program for the provision of prevention of mother-to-child transmission (PMTCT) services. The entry point might be the need to review progress on the program to see if it is being implemented as planned and if the women who were expected to benefit are indeed benefiting; thus, the entry point is the decision cell. The DDIU activity may consist of facilitating the link between the implementation of the monitoring strategy and the use of the ensuing data to review the program and make decisions for mid-course correction of the program. The stakeholders would be the program managers of the program as well as the funding agency.

Evaluation (row four) Our last example might involve a program evaluation of a USAID family planning project that has reached its final year. The evaluation has collected a host of data and has reached a number of conclusions about the project. The entry point here is the evaluation report and the data. The DDIU opportunity is to facilitate the use of the evaluation report and its data to decide whether the project should be continued and/or scaled up to other regions of the country. The stakeholders would be the funding agency of the project, the public sector agencies responsible for this kind of service, and advocacy groups for women's reproductive issues. DDIU activities may involve training in data interpretation and presentation techniques, organization of consultative meetings to review the evaluation findings, and assistance with identifying further analysis of the data that may reveal additional information.

Step 3: Selecting tools and approaches

Once the DDIU Assessment has been carried out and the point of entry, the domain, and the anticipated results have been identified, a DDIU intervention strategy can be developed. Since the strategy involves information from steps 1 and 2, the most important remaining task is selection of the DDIU tools and approaches that will be used. Hence, the strategy will consist of deciding the entry point and domain, the beneficiaries and stakeholders, the DDIU tools and approaches to take, and the expected results. It should be emphasized that in most cases the DDIU strategy will be an ongoing process that involves several interventions.

There are various DDIU-specific tools and interventions that can be implemented for the purpose of assessing, planning for, and monitoring evidence-based decision making. We listed some of these tools and interventions under Step 3; some of these are presented in more detail later in this document.

Let us use two of the above examples to illustrate a DDIU strategy.

Example 1: Preventing sexual abuse in schools

The first example above involves the adolescent advocacy NGO and potential sexual abuse of girls in school.

| | |
|---------------------------------------|--|
| Entry point | NGO / advocacy group |
| Data | Focus group discussions among girl and boy students; school officials and teachers; parents; community leaders; documented cases of abuse. |
| Decisions/use of data | Results from focus group discussions and cases prepared as an advocacy presentation for school and Ministry officials. |
| Stakeholders and beneficiaries | Girl students; parents; school personnel. |
| DDIU tools and approaches | Stakeholder engagement; information use mapping; technical assistance and/or capacity building as determined by the DDIU Assessment. |
| Expected result | Action plan for a strategy to reduce the risk of sexual abuse to girls. |

Example 2: Program Monitoring for PMTCT

Our second example above involves monitoring and mid-course correction for an ongoing PMTCT program.

| | |
|---------------------------------------|---|
| Entry point | Decisions around continuation of the program. |
| Data | PMTCT program monitoring indicators on the program PMP. |
| Decisions/use of data | Assessment of project's success in reaching program goals; whether any mid-course corrections to program strategies are warranted. |
| Stakeholders and beneficiaries | PMTCT program managers; pregnant women; program funding sources. |
| DDIU tools and approaches | In connection with the development of the program's PMP, a DDIU approach would include use of the decision calendar to link the PMP data to program strategy changes; a constraints to data use assessment might be performed to ascertain what technical assistance of capacity building might be useful, e.g. data analysis techniques. Other technical assistance approaches may be determined by the DDIU Assessment. |
| Expected result | A revised PMTCT strategy based on the PMP data. |

Step 4: Application and assessment

Step 4 involves use of the tools and approaches outlined in the strategy. In the following sections, we explain in detail how and when to use the various DDIU tools.

Once the DDIU activity is underway, it is important, as with any intervention, to track the impact of the DDIU approach. The most important part of this assessment will be to determine if the expected results were achieved. Since the results of DDIU will normally be the creation of some report, policy, or plan of action, assessment will consist of determining if such products were achieved and if they are attributable to the DDIU activity. Example 1 above would include tracking to ascertain if the action plan had, in fact, been developed, and the extent to which data and information informed it. In some cases, the DDIU activity may aim for some kind of individual or organizational level change in the area of data and information use. Such results will be more demanding in terms of data. MEASURE Evaluation has developed a set of indicators to measure such changes.¹

DDIU tools and approaches

In the following sections, we present five of the core DDIU tools that have been developed to help promote evidence-based decision making and to improve the performance of M&E data systems. These include the Decision Calendar, Assessment of Constraints to Data Use, Information Use Mapping, Stakeholder Engagement and PRISM Tools. As more tools and approaches are field-tested and refined, they will be added to this compendium. Although the tools are presented here together, they can also be used independently as required in the particular context in which they are being applied.

Find the most recent versions of the DDIU documents and tools at the MEASURE Evaluation Web site, <http://www.cpc.unc.edu/measure>.

¹Contact the DDIU team at MEASURE Evaluation to request these indicators.



Decision Calendar

A management tool for evidence-based decision making:
shifting the focus from defining the problem
to addressing the solution

Data Demand and Information Use
Part Two: Strategies and Tools

MEASURE Evaluation
www.cpc.unc.edu/measure

Decision Calendar

The Kenyan national population agency was troubled by a stall in the fertility decline and plateau in contraceptive prevalence rate after years of success in increasing family planning.

The Decision Calendar tool helped the agency see the need for secondary analysis of the Demographic and Health Survey dataset. This analysis revealed how program modifications would deliver better results—and enabled the Division of Reproductive Health to lobby successfully for additional resources.

In fact, their evidence-based advocacy was so compelling that the organization was accorded a government-funded budget line item for family planning supplies for the first time.

Scenario

Why is this tool important?

Important program and policy decisions are often made based on insufficient data, even when a wealth of information is available.

In areas of the world where the need is great and resources are limited, policy and program decisions must produce the best possible outcome. The urgency and expense associated with major issues such as population and disease control require more than intuition and experience. Even if the decision made by “gut feel” or personal insight is sound, the decision maker will find it difficult to lobby persuasively for the resources to implement it.

Both needs—the need to make optimal decisions and to have a compelling case for advocacy—call for proof with facts. Yet fully evidence-based decision making has been rare, for any or all of the following reasons:

- ❑ In many cases, a wealth of data resources are available, due to significant increases in data-gathering through national and local surveys and routine data collection efforts, but **research reports are sitting on a shelf** and are not being used to drive evidence-based decisions.
- ❑ **Existing data resources are inadequate** for decision making, perhaps because research processes did not consider how data might be used later, or decision makers do not have confidence in the data.
- ❑ Critical policy/program decisions need to be made, and **there is not enough information** to support the best decisions or to advocate persuasively for the required resources.

The Decision Calendar is a tool to resolve these mismatches. It aligns data resources with the decisions they would support, and vice versa. The tool helps program managers appreciate the need for good supporting data, helps data managers visualize how their work can be applied, and helps all stakeholders prioritize decisions and data-collection activities.

Description

What does this tool do?

Supports evidence-based decision making by creating and strengthening links between information and decision-making processes.

The Decision Calendar is a management tool—a combination of template and process—that serves three key purposes:

- ❑ **Encourage greater use of information in decision making**—Identifies and documents key policy/program decisions that must be made, and from that understanding, identifies the information needed to support those decisions.
For example, a national AIDS program has just initiated a multi-sectoral HIV/AIDS program and leaders have major decisions to make about program design, management and priority-setting.
- ❑ **Encourage better use of existing information**—Identifies existing data resources and uncovers new ways to use that information to support evidence-based decision making.
For example, a research group mandated to evaluate the effectiveness of a national family planning program has completed the report and is now interested in ensuring that this information is used to improve programs and influence family planning policies.
- ❑ **Monitor the use of information in decision making**—Provides a timeline for monitoring progress in the decision-making process, and a systematic way of identifying data use by program managers, donors, and consultants.

The Decision Calendar can be developed and applied at the international, regional, national or local level. The tool acknowledges that decision-making processes and stakeholders will vary in different arenas—political, programmatic, or policy—and accommodates them individually.

The Decision Calendar is a working document that should be extended and revised as a program develops and changes.

Audience

Who should use this tool?

Anyone involved in collecting, analyzing, reporting and using health information.

The tool has four principal sets of users:

(1) MEASURE Evaluation representatives or other technical support consultants/facilitators:

- ❑ Provide the Decision Calendar template.
- ❑ Establish relationships with host-country contributors.
- ❑ Facilitate and mentor host-country staff as they complete the template.

- Provide technical assistance in obtaining and interpreting information.
- Monitor the results gained from using the template.

(2) Host-country decision makers, such as program managers and other key stakeholders:

- Participate in the creation of their unique Decision Calendar.
- Use the Decision Calendar to identify and address data gaps.
- Incorporate the Decision Calendar into decision-making processes.

(3) Data specialists, such as monitoring and evaluation (M&E) specialists:

- Contribute their knowledge of data resources to the Decision Calendar.
- Identify ways their existing quality data can be integrated into decision-making processes, creating “retrospective demand” for their data.
- Identify ways to resolve any data gaps, such as data cleansing, reformatting, secondary analysis or new data collection activities.

(4) A designated manager for the Decision Calendar program:

- Selects the stakeholders to create and implement the Decision Calendar.
- Ensures appropriate representation and authority on the team—individuals who can champion decisions in their areas of influence.
- Monitors the development, use, and updating of the Decision Calendar.

Timing

When would this tool be used?

For best results, the Decision Calendar would be in place and routinely updated.

Completing the Decision Calendar should not be a one-time exercise tied to one specific calendar date or decision point. Ideally, it should be a working tool, integrated into annual work plans and regularly referenced, monitored, and updated.

However, several conditions may trigger the initial creation of a Decision Calendar or an update to an existing calendar:

There is a specific, identified decision to be made. For instance, an external agency might be working to develop national strategic plans for HIV/AIDS programs for a region. Knowing that targeted decisions will be made to formulate these plans, this is a prime opportunity to engage stakeholders in creating a Decision Calendar.

Stakeholders need more evidence-based decisions. Evidence-based decisions can improve outcomes and help stakeholders lobby for needed resources. If a group of stakeholders that has these objectives is known, the timing could be right for engaging them to create a Decision Calendar that aligns with their annual work plan.

Existing information is underutilized. M&E specialists or other data managers might wish to see greater use of existing data resources they have created. A Decision Calendar can help link them with decision makers who could benefit from their work.

A new data collection activity is being planned. The Decision Calendar ensures that the planned research activity will produce information that is relevant to decisions that must be made.

Applications

Who has already used this tool?

Representative field applications in Africa and the Caribbean

Kenya – August 2005

National Coordinating Agency for Population Development (NCAPD)

Analysis of Factors Affecting Fertility and Contraceptive Use

MEASURE Evaluation helped the NCAPD develop a Decision Calendar that identified opportunities to use secondary analysis of fertility data to support evidence-based decisions about contraceptive planning. This analysis enabled the agency to:

- Demonstrate the need for additional resources.
- Gain a new government-funded budget line item for family planning supplies.
- Raise the priority of the national family planning program.
- Increase participation in national planning for reproductive health services.

Dominica, St. Lucia and St. Vincent – June-August 2005

National AIDS Program

MEASURE Evaluation facilitated development of a Decision Calendar to guide the information systems for an expanded response to HIV/AIDS. The Decision Calendar encouraged all participants to think more strategically about data collection efforts—and, in turn, to focus research activities on getting targeted information to support program and policy decisions.

About this document

What is in this tool guide?

Decision Calendar description, blank template, approach and process

This document contains descriptions of:

- The purpose, audience and typical applications for this tool.
- Guiding principles of the Decision Calendar methodology.
- The structure of the Decision Calendar template.
- A systematic process for creating a Decision Calendar.
- A checklist to use in implementing the process.

Guiding principles

The Decision Calendar approach

Issues and considerations for using this tool

Host-country representatives must have ownership.

If the Decision Calendar is to serve as an ongoing management tool, it must reflect the perspectives, needs, and interests of the people who will actually be using it. One of the first process steps is to secure input and buy-in from the host-country stakeholders who will ultimately be the owners of this tool. The identified program manager should be someone who will champion the Decision Calendar methodology as an ongoing endeavor.

This is a collaborative and iterative process.

Collaborative. The Decision Calendar can be applied or developed directly by a program manager or the staff of an organization. However, an external consultant (such as a MEASURE Evaluation representative) can be of great assistance as a facilitator in drafting the original calendar.

Iterative. The process usually entails a group meeting with key stakeholders to brainstorm the decisions and data requirements. However, it is common at this time to identify other potential contributors and reviewers, so you should expect this to be an iterative process, with additional modifications to the Decision Calendar.

A successful Decision Calendar draws on multiple resources.

Reference materials include, but are not limited to the following:

- ❑ Strategic plan for the targeted program or organization.
- ❑ M&E plan or results framework for the target program or organization.
- ❑ M&E operational plan.
- ❑ Assessments of M&E systems and/or information use.
- ❑ Specific data sources, such as Demographic and Health Surveys (DHS), Priorities for Local AIDS Control Efforts (PLACE), HIV/AIDS Service Provision Assessments (HSPA), special study or evaluation.

In some cases all of these documents will be available. In other cases, no documentation will be available, and the facilitator or in-country counterparts will conduct interviews with various stakeholders.

The Decision Calendar template is flexible, adaptable and extensible.

Flexible. The template presented in this document was developed from extensive experience with health care and population planning issues in Africa and the Caribbean. However, the tool reflects best practices that are applicable to a broader realm of issues and environments. It should always be kept in mind that the tool is flexible enough to be modified to fit specific situations as necessary.

Adaptable. Users can adapt the specifics of the template—the categories and columns, for instance—to suit their unique needs. For example, a column that defines the arena in which the decision is made,

such as an ad hoc or regularly scheduled meeting might be added. Or, the Required Information column might be split to include a Format field that specifies whether the information should be in the form of a PowerPoint presentation, email with bullet points, Excel worksheet, etc.

Extensible. The Decision Calendar should be a working document that is extended and revised as a program develops or changes.

The Decision Calendar was designed to encourage a systematic process that links decisions and data. Within that objective, the specific appearance of the template—and the time span it addresses—can be adapted to the specific needs of the tool’s owners/users.

There are two different ways to use this tool.

In some cases, the tool will be used to help data specialists identify useful applications for their data. In other cases, the tool will help decision makers identify the data requirements of their upcoming decisions. The template serves both perspectives, but the process steps naturally will be somewhat different.

Program managers and decision-makers would probably follow these steps:

1. Identify key decisions that need to be made.
2. Determine the key stakeholders in these decisions.
3. Document the data sources required to make these decisions.
4. Clarify next steps to get or use the needed data sources.

M&E specialists or other data researchers would likely take these steps:

1. Review available data resources.
2. Conduct subsequent analysis as needed.
3. Identify key findings of that analysis.
4. Identify key decisions that could be influenced by these findings.
5. Present these insights to appropriate stakeholders.

Process steps will not necessarily be sequential.

The Process Action Plan presented in this document outlines a logical sequence of steps, from project initiation to post-project review. However, it would be typical for some steps to take place simultaneously or out of sequence. Therefore, this Process Action Plan should be considered a guiding framework and not a strict prescription.

The Decision Calendar template

Presenting the global template

For decision-driven data planning

This section presents a blank version of the Decision Calendar template. The next section describes the type of content to be included in each category and field. You will see two versions of the template:

- Version 1—An at-a-glance overview for all decisions in a given period.
- Version 2—A detailed worksheet for each of three decision categories.

Stakeholders can determine which version of the template works best for their needs and what time period they want to include at this point. They might choose to use summary and detailed versions together.

Decision Calendar template – Version 2 (Category view)

| | |
|---------------------------------|--|
| Decision Calendar title | |
| Agency/Program | |
| Program manager | |
| Facilitator | |
| Time period for decision making | |

| Part A: Policy, planning and advocacy decisions | |
|---|-----------|
| Decision: | |
| Frequency: | |
| Stakeholders: | |
| Required information: | |
| Next steps: | Timeline: |
| | |
| | |
| | |
| | |
| | |
| | |

Continued - Part B, Program design and improvement decisions, on next page

Decision Calendar template – Version 2 (Category view continued, section 2 of 3)

| Part B: Program design and improvement decisions | |
|---|-----------|
| Decision: | |
| Frequency: | |
| Stakeholders: | |
| Required information: | |
| Next steps: | Timeline: |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

Continued - Part C, Program management and operation decisions, on next page

Decision Calendar template – Version 2 (Category view continued, section 3 of 3)

| Part C: Program management and operations decisions | |
|--|-----------|
| Decision: | |
| Frequency: | |
| Stakeholders: | |
| Required information: | |
| Next steps: | Timeline: |
| | |
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| | |
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| | |
| | |

End of Decision Calendar template, version 2 (detailed view by category).

Categories and fields in the Decision Calendar template

How to create a Decision Calendar

Desired content for each area of the template

Both the summary and detailed category versions of the Decision Calendar template are divided into three primary categories and six columns or fields. This section describes the type of content that goes into each area of the template.

The three categories of the Decision Calendar

The Decision Calendar groups decisions into three categories, because the environments, stakeholders, and decision-making processes are unique for each of these categories:

- Policy, planning, and advocacy decisions.
- Program design and improvement decisions.
- Program management and operations decisions.

Policy, planning and advocacy decisions typically follow an established process for formalization and approval. This category would include national, sector-wide, and resource allocation decisions, such as:

- Developing an HIV/AIDS national strategy document.
- Formulating HIV/AIDS workplace policy.
- Defining a family planning counseling protocol.
- Allocating national funds to a health information unit.

Program improvement and design decisions can address many aspects of a program life cycle, from initial design to improvement, scale-up, sustainability, and possibly close-out. Sample decisions in this category could relate to:

- Improving procurement strategies for drugs or other commodities.
- Enhancing the effectiveness of family planning counseling.
- Designing a program to prevent mother-to-child transmission of HIV/AIDS.

In adapting this template, decisions about detailed program areas might be categorized further, with a lead stakeholder identified for each. For example, within a multi-sector approach to HIV/AIDS, decisions might be grouped into the following sub-categories:

- Voluntary counseling and testing (VCT).
- Behavioral change and communication.
- Prevention of mother-to-child transmission of HIV/AIDS.
- HIV/AIDS in the workplace

Because of the dynamic nature of programs, this section of the Decision Calendar should be updated often.

Program management and operations decisions relate to the administrative, financial and logistical factors that affect the success of a program, such as:

- ❑ Number of staff to support program monitoring.
- ❑ Reporting mechanisms.
- ❑ Allocation of national program funds to districts or local implementers.

In practice, categories often are interrelated and decisions in separate categories can at times overlap. For example, decisions based on the cost-effectiveness of a specific program may be included in either this category or the previous one (Program design and improvement), since stakeholders will need to draw upon both financial and program-related data.

The columns/fields of the Decision Calendar template

This section describes the type of content that would be included in the six key fields or columns of the Decision Calendar.

Decision describes either the known decision that must be made, or the decision that could potentially benefit from known data resources.

Frequency describes whether the decision is routine or non-routine.

Routine decisions are those made on a daily, weekly, monthly, quarterly or annual basis, such as:

- ❑ Allocating funds to a national hospital (annual).
- ❑ Determining the number of family planning counselors to be trained and where they will be deployed (annual).
- ❑ Allocating anti-retroviral (ARV) drugs to regional drug stores (quarterly).

Non-routine decisions are made on an occasional or ad hoc basis, and may be one-time decisions, such as:

- ❑ Determining functions and authority by the type of provider administering anti-retroviral drugs (to be included in a national HIV/AIDS care and treatment protocol).
- ❑ Developing public service announcements to reduce partner disapproval of family planning through male involvement strategies.
- ❑ Disbursing donated family planning commodities to VCT sites.

This distinction is important because actions will differ for routine decisions, for which decision-making processes and timelines are well-established, or non-routine decisions, for which new communication channels, connections, or timelines may need to be defined.

Decision makers and other stakeholders include individuals and groups that will be involved in making the decision. “Decision maker” would be the primary individual (name or title) who has ultimate authority for the decision. “Other stakeholders” would include other individuals or groups involved in advocating for or implementing the decision.

This field might include such stakeholders as the following:

- National AIDS program coordinator
- Prime Minister
- Minister of Finance
- Program director
- Chief Medical Officer

Required information identifies either the data resources that would be required to support the decision or the existing data resources for which a field application is sought.

This field should include the data source, status of this data source, and quality of the data available. All information should be as specific as possible. An entry could be quite explicit, such as “The number of pregnant women who have been tested in the last six months.” An entry could also name a specific report, or a subset or range of data elements from a named report, or a data resource that does not yet exist.

For existing data sources, some indication of the degree to which stakeholders have confidence in the data should be included. Even if this is a subjective impression of data quality, it will indicate their willingness to accept that data as a foundation for decision making.

Below are some sample entries for Required Information field:

- Service statistics for ante-natal care (ANC)
- National budget for ARV drugs
- National Demographic and Health Survey (DHS)
- Sentinel Surveillance Data for tuberculosis (TB)
- GPS coordinates for voluntary counseling and testing sites

Next Steps outlines an action for resolving a data gap or integrating data into decision-making processes. These should be straightforward, action-oriented statements; for example:

- Collect the available data and present it at the biannual planning meeting.
- Aggregate from laboratory records to find out how many people have been tested for HIV/AIDS in the last six months.
- Prepare a brief with key recommendations for scale-up of immunization services.
- Interpret trends on family planning uptake over the last five years.
- Present key findings and recommendations to stakeholders.

Timeline presents a concrete, actionable timeframe for the Next Step, so progress can be objectively monitored against the original plan.

Sample Decision Calendar – Version 1 (Summary View)

Excerpts from a typical Decision Calendar

| | |
|---------------------------------|--|
| Decision Calendar title | Kenya: Analysis of factors affecting fertility and contraceptive use |
| Agency/Program | National Coordinating Agency for Population and Development |
| Program manager | Executive Director |
| Facilitator | Deputy Director for Policy and Programs |
| Time period for decision-making | Fiscal Year 2005-2006 |

| Part A. Policy, planning and advocacy decisions | | | | | |
|---|-----------|---|--|--|---|
| Decision | Frequency | Decision maker and other stakeholders | Required information | Next steps | Timeline |
| Incorporate demand creation for family planning in the new Reproductive Health Policy | One time | Permanent Secretary, Ministry of Health Family planning non-governmental organizations (NGOs) and donor agencies | Analysis of Information, Education and Communication (IEC) trends from the Demographic and Health Surveys (DHS) Revised IEC and Advocacy Strategy | Review draft Reproductive Health Policy and identify places to insert recommendations for demand creation. | Review policy draft August-November 2005 Publish final Reproductive Health Policy in February 2006 |
| Part B. Program design and improvement decisions | | | | | |
| Decision | Frequency | Decision maker and other stakeholders | Required information | Next steps | Timeline |
| Convene conference to review community-based distribution (CBD) strategies for Kenya | One time | Division of Reproductive Health, Ministry of Health Family planning NGOs and development partners | Analysis of CBD trends from the DHS surveys Inventory of current CBD programs Studies on cost and benefits of CBD programs | Prepare a concept paper for the conference. Mobilize resource to hold the conference. | Complete concept paper January 2006 Convene conference October 2006 |

| Part C. Program management and operations decisions | | | | | |
|--|---|---|---|---|---|
| Decision | Frequency | Decision maker and other stakeholders | Required information | Next steps | Timeline |
| Finalize agreement with development partner on the Population Education and Advocacy Project | One time (on contract renewal, every three years) | Development partner: Japan International Cooperation Agency (JICA) Division of Reproductive Health, Ministry of Health Family planning NGOs Kenya Institute of Mass Communications | Analysis of IEC trends Revised IEC and Advocacy Strategy | Prepare detailed project agreement and implementation plan. Finalize negotiations with JICA. | Negotiations from August-December 2005 Signed agreement in December 2005 |

Process Action Plan

Using the Decision Calendar tool

Steps to the plan.

Step 1. Identify the need.

1.1 Identify a potential opportunity.

Communicate with host-country counterparts to identify opportunities for implementing a Decision Calendar. Sometimes the opportunity becomes clear when MEASURE Evaluation is asked to develop an M&E framework or plan. The logical first step to this task would be to ask not what the requesting group needs to report, but rather what kinds of decisions need to be made—and this is where a Decision Calendar can be invaluable.

1.2 Determine how the Decision Calendar would be used for this need.

Will it be used to increase the use of an existing data source and link it to decisions that could benefit, or will it be used to help a group or project team be strategic in identifying the information they need to support evidence-based decisions? The perspective will influence certain aspects of this process, such as which stakeholders lead the agenda in the Decision Calendar workshop and what types of actions are recommended in the calendar.

Step 2. Create an internal plan for responding to the need.

2.1 Coordinate with key development partners.

Contact your U.S.-based and in-country colleagues to determine an achievable timeline for providing this technical assistance (given available resources), as well as an appropriate protocol for contacting in-country stakeholders.

2.2 Draft the internal action plan/proposal.

This document would describe:

- The need identified in Step 1.
- How your organization will provide technical support to address that need.
- How this activity fits into your organization's priorities and workload.
- The preliminary list of stakeholders and how they will be engaged.
- A high-level outline of process steps.

2.3 Review this plan with the your U.S.-based and in-country colleagues, and incorporate their feedback.

2.4 Obtain approval from necessary counterparts, according to your organization's protocol, to proceed with the Decision Calendar technical support activity.

Step 3. Engage project stakeholders.

Good relationships and buy-in are essential, because the success of the Decision Calendar rests on several issues that stakeholders either control or know better than anyone, such as:

- How committed are they to implementing, tracking, and updating the Decision Calendar?
- How confident are they about using given data sources to support decisions?
- What expertise, resources, and decision-making forums are available?
- What behind-the-scenes factors will influence project success?

Stakeholders might have been previously identified through a formalized process, such as a stakeholder analysis, or informally through communication with an in-country counterpart.

3.1 Contact the lead stakeholder.

In-country counterparts and colleagues can identify the best way to initiate contact (and the most likely person to be a champion for the Decision Calendar) and make introductions for you. If you are not planning to be in-country for another reason, this initial contact can be made by remote communication—phone or email. Facilitators generally travel on-site when the actual work of completing the Decision Calendar template begins.

3.2 Determine the complete context for the Decision Calendar activity.

Working with the lead stakeholder, determine the total environment in which the Decision Calendar will be used. What are their pressures, available resources and priorities? For example, the stakeholder might be under pressure from a donor agency to scale up a specific program, so there will naturally be more focus on that program.

3.3 Determine the role and participation level for each stakeholder.

This list should include representation both from program managers and data specialists. Here are some questions you might ask during this initial discussion:

- In addition to this list, who else needs to be involved in this process?

- What is each person's role in this process—their current and expected participation? Some stakeholders, such as the Minister of Health, will have a vested interest in the Decision Calendar activity but will have limited involvement in actually creating it.
- What resources and expertise does each one bring to the process, in terms of time available, support staff, external funding, or other resources?
- What external pressures, projects, or funding issues will also be influencing factors?

Step 4. Plan the approach for implementing the Decision Calendar.

4.1 Determine the most appropriate forum for drafting the Decision Calendar.

In most cases, this will be a formal workshop with all key stakeholders. To save contributors' time, the Decision Calendar workshop can be held when the group would be together anyway, such as during an M&E workshop.

In rare cases, the Decision Calendar will be drafted in one-on-one sessions with one influential stakeholder—a very high-level person or one with sole responsibility for a decision. The results will later be disseminated for review. This option is less desirable than a group workshop, but it may be the best option when other stakeholders are unavailable or have not yet been hired.

4.2 Define roles and responsibilities for implementing the Decision Calendar.

Who will be project lead? What are the responsibilities of various contributors?

4.3 Establish an agenda for the forum.

If the Decision Calendar is being used to help decision makers think strategically about their data requirements, the agenda should open with lead decision makers. If the Decision Calendar is being used to promote greater use of existing data in the decision making process, M&E and data specialists should present earlier.

4.4 Define the timeline for major milestones.

When will the workshop or meetings to draft the Decision Calendar take place? When will a final draft of the Decision Calendar be available? When will there be follow-up to assess decisions and verify that they have incorporated the identified information? On what schedule or under what conditions will the Decision Calendar be updated or extended?

Step 5. Facilitate the creation of the Decision Calendar by host country counterparts.

5.1 Hold the forum to draft the Decision Calendar.

For purposes of this Action Plan, we will assume that the forum is a formal workshop with 10 to 15 stakeholders/contributors. This will be an in-person workshop at a site convenient to the majority of attendees, held in a room that is conducive to brainstorming in small groups as well as open group work, with flip charts or a board.

5.2 Facilitate a brainstorming session to identify key decisions to be made.

In the past, it has proven overwhelming to expect the group to brainstorm *all* the decisions, data requirements and recommendations on one large wall chart or blackboard. Below is a high-level view of an approach that has proven effective, even for large and diverse groups:

- ❑ **Organize the group into sub-groups** based on their strategic objectives and areas of interest. For instance, you might group all the people who are working on ART programs, or those associated with HIV/AIDS policy.
- ❑ **Have each group write up their key decisions** on flip chart paper. You can prompt them with open-ended questions, such as, “Which decisions do you have to make for policy? For programs? For day-to-day operations? Which decisions do you make daily? Monthly? Quarterly?”
- ❑ **Have a co-facilitator describe the three key categories** of the Decision Calendar: policy, planning and advocacy decisions; program design and improvement decisions; and program management and operations decisions.
- ❑ **Cut the flip chart paper into pieces**, one decision per piece of paper, and return them to the small group that wrote them.
- ❑ **Have participants assign each decision to a category** and justify their choice. This process promotes strategic thinking about how various decisions would be made and what information would support those decisions.
- ❑ **Paste the decisions onto the wall under the appropriate category.** From here, patterns, overlaps, or redundancies may emerge, which helps in the following steps.

5.3 Identify the data requirements for these decisions.

Ideally, a data specialist would give an overview presentation about existing data sources. However, there is not always time for this step. It may be necessary to solicit this information before the forum and present it in a handout, PowerPoint presentation, or summary flip chart.

5.4 Connect decisions with data.

Where there is a manageable number of decisions and data resources, it can be useful to write a list of decisions on one half of a blackboard and a list of data resources on the other half. The group can then more readily visualize the connections between these elements, while you actually draw lines connecting decisions with data sources. This step can take one or two hours.

At this stage, it will become clear where there are gaps between the information that is needed and what is available. Does the information even exist? If it does, is it good quality? Does it need secondary analysis or interpretation? Can we access it?

5.5 Complete the remaining fields of the Decision Calendar.

Type up the list of decisions from the blackboard or flip chart pieces, and move on to completing the remaining fields for each decision, such as next steps and timeline. If the identified issue is an inadequacy in the data, the next steps might be to:

- ❑ Perform data management tasks, such as aggregate data or convert formats.
- ❑ Reconcile issues with data quality.
- ❑ Engage a consultant or staff person to conduct secondary analysis.

If the issue is to strengthen links between data and decisions, next steps might be:

- Identify a forum for injecting data into the decision-making process (such as via direct communication, annual meetings of program implementers, community forums, etc.).
- Establish a format for disseminating data to decision makers (PowerPoint presentation, briefing paper, lecture, pamphlet, or Excel tables).
- Create a new forum, such as a human rights workshop that brings together people with an interest in HIV/AIDS—from the national secretariat to those living with the virus—to share available knowledge on the issue.

Define a timeline that enables stakeholders to objectively monitor progress on the next steps.

5.6 Prioritize the decisions and next steps.

There is typically not enough time in the workshop to perform this step, but it is important, because priorities may change as a result of this exercise. For instance, the group might have prioritized a decision for which no supporting information is yet available; that decision might drop in priority until a data-collection process takes place. This step will probably require follow-up with the lead stakeholder or activity lead.

5.7 Conduct follow-up interviews or meetings as necessary.

Invariably, the first workshop will prompt ideas, questions, or issues that cannot be addressed by those who are present. There will almost always be a need for follow-up with other individuals. Identify other potential contributors and integrate them into the process.

If the Decision Calendar is being used to promote greater use of existing data resources, Step 5 would be modified accordingly. Rather than focusing on decisions and working backward from there to determine data requirements, the participants would outline known data resources and work forward from there to identify decisions that could leverage that information.

Step 6. Build host-country capacity to use the Decision Calendar as a management tool.

6.1 Determine a management process for ongoing use of the Decision Calendar.

How will the organization manage and use the Decision Calendar from here on? How often will they reference the tool, monitor progress, update to add new items, or delete items that have been completed? You can help articulate this process and thereby ensure the continued usefulness of the Decision Calendar as a management tool and not just a one-time exercise.

6.2 Promote the integration of the Decision Calendar into annual work plans.

Encourage host-country counterparts to incorporate the Decision Calendar into the strategic annual plan for their organization, and to extend and revise the document as their programs develop or change.

6.3 Support and mentor the program manager in using the Decision Calendar.

Maintain a relationship with the program manager and provide follow-up support and mentoring as necessary to overcome any barriers or challenges. This can be informal, such as touching base with the program manager by email or when other work takes you in-country.

Step 7. Monitor and document the results of using the Decision Calendar.

An objective of MEASURE Evaluation (and the driving purpose of the Decision Calendar tool) is to promote evidence-based decision making. This objective is shared by many organizations. Furthermore, donor organizations (such as USAID, CDC and World Bank) want to know that the research they have sponsored has proven value and that the programs they have sponsored have proven results.

All of these objectives are served by monitoring the use of the Decision Calendar and documenting the successes that can be directly or indirectly attributed to its use. So it is wise to maintain a relationship with the in-country “owner” or champion of the Decision Calendar—even if it is just email correspondence—and periodically find out the following types of information:

- Is the organization updating the Decision Calendar on its own?
- How often does the organization refer to the Decision Calendar?
- What evidence-based decisions have benefited from the Decision Calendar?
- What documentation is available to substantiate the result? (This could be an email, newspaper article, press release, budget allocation, new subcommittee, etc.)
- What information influenced those decisions?
- Is there a general increase in evidence-based decision making? To what degree?

There will usually be multiple factors that weigh into any decision, but we should be able to show that data resources were present in the circle of influence. It might be unrealistic to draw a direct cause-and-effect relationship between the data and the outcome, but if the Decision Calendar methodology was active, we can at least feel confident that data resources were considered.

Checklist

For developing a Decision Calendar

Summary of the Process Action Plan.

Use the following checklist as a reference for the process steps. Note that some steps may take place simultaneously or in a different order. However, this checklist should help ensure that a systematic approach and best practices have been followed.

- Step 1. Identify the need.**
 - 1.1 Identify a potential opportunity.
 - 1.2 Determine how the Decision Calendar would be used for this need.
- Step 2. Create an internal plan for responding to the need.**
 - 2.1 Coordinate with U.S.-based and in-country colleagues.
 - 2.2 Draft the internal action plan/proposal.
 - 2.3 Review and refine plan with colleagues in your organization.
 - 2.4 Get approval to proceed with the technical support activity.

- ❑ **Step 3. Engage project stakeholders.**
 - ❑ 3.1 Contact the lead stakeholder.
 - ❑ 3.2 Determine the complete context for the Decision Calendar activity.
 - ❑ 3.3 Determine the role and participation level for each stakeholder.
- ❑ **Step 4. Plan the approach for implementing the Decision Calendar.**
 - ❑ 4.1 Determine the best forum for drafting the Decision Calendar.
 - ❑ 4.2 Define roles and responsibilities for implementing the tool.
 - ❑ 4.3 Establish an agenda for the forum.
 - ❑ 4.4 Define the timeline for major milestones.
- ❑ **Step 5. Facilitate the creation of the Decision Calendar.**
 - ❑ 5.1 Hold a forum to collaboratively draft the Decision Calendar.
 - ❑ 5.2 Facilitate a brainstorming session to identify key decisions.
 - ❑ 5.3 Identify the data requirements for these decisions.
 - ❑ 5.4 Connect decisions with data, or vice versa.
 - ❑ 5.5 Complete the remaining fields of the Decision Calendar.
 - ❑ 5.6 Prioritize the decisions and next steps.
 - ❑ 5.7 Conduct follow-up interviews or meetings as necessary.
- ❑ **Step 6. Build host-country capacity to use the Decision Calendar.**
 - ❑ 6.1 Determine a management process for ongoing use.
 - ❑ 6.2 Promote the inclusion of the calendar in annual work plans.
 - ❑ 6.3 Support and mentor the program manager as needed.
- ❑ **Step 7. Monitor and document results of using the Decision Calendar.**

Conclusion

More effective, evidence-based decisions

Ensure that the right information is available to support optimal policy and program decisions.

In complex decision-making environments, influenced by multiple internal and external pressures, it can be extremely difficult to follow best practices for data collection and use.

Data might be collected to satisfy the reporting requirements of a donor agency, but this information might not be fully aligned with policy and program decisions that must be made. Or, host country stakeholders might not be convinced that the information should even be used in decision making in the first place, if their input was not considered in the data planning, or they are not confident of data quality.

Often, valuable data resources remain unused when they could yield better decisions that improve the effectiveness of programs and organizations, and, in turn, benefit the lives and health of more people.

The Decision Calendar was developed to meet this need, to provide a systematic approach for stakeholders to leverage data—tangible evidence of real-world conditions—into more productive and optimized decision processes.

Acknowledgments

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Assessment of Data Use Constraints

An assessment tool to identify barriers and constraints that inhibit evidence-based decision making

Data Demand and Information Use
Part Two: Strategies and Tools

MEASURE Evaluation
www.cpc.unc.edu/measure

Assessment of Data Use Constraints

Smallpox—the highly contagious disease that killed 300 to 500 million people in the 20th century—was finally subdued by aggressive vaccination campaigns. In 1979, the World Health Organization certified the disease beaten—eradicated.

So you can imagine the alarms that went off when a West African government authority reported an incidence of smallpox some 25 years later. This was a serious matter for the country and the world, requiring urgent attention. Could a virulent new strain be surfacing? How many human lives could be affected?

When a department head investigated the reported case, he found that the physician had actually diagnosed chickenpox—a simple disease that most children contract and survive, with no lasting effects other than immunity. The local officer responsible for sending local data to state headquarters did not realize the mistake, nor did he have an expert eye or a computer system that could have spotted the error before it went up the line.

An assessment of the data use constraints identified the shortage of skilled personnel, computers and other resources—and empowered program managers to lobby effectively for those resources, plus more staff training on data quality.

Scenario

Why is this tool important?

Vast amounts of data are sitting in reports that will never be used for decision making. Why?

In health information systems, the ultimate purpose of collecting and analyzing data is to improve programs by enabling more informed decisions—evidence-based decisions.

“Did the awareness campaign increase use of oral contraceptives?” ... “Have our counseling efforts increased acceptance of HIV/AIDS testing?” ... “Have we increased the percentage of pregnant women who receive ante-natal care over the past three years as planned?” ... Questions such as these must be answered with facts, rather than intuition or estimation. Yet in many areas of the world, decision-makers do not have access to the required data... or they do not realize how data can be used to improve decisions... or the information they need does not exist or is not trusted. There are many reasons, or constraints, for these conditions.

Organizational constraints. Organizational processes might not support the use of data. For instance, officials might be reluctant to use data that has not been officially sanctioned. Perhaps the release of certain, sensitive information—such as figures that reveal a measles outbreak—is tightly controlled. This information can be shared only by official protocol. More often, there are simply no channels or systematic processes to share data with people who could use it.

Technical constraints. The endemic shortage of computers is an obvious technical constraint, but there are other common technical issues that erode data quality. For instance, contributors could be defining health indicators differently, or using different sources for the same data element or indicator, or using different algorithms to report it.

What if the World Bank gives one estimate for infant mortality and the ministry of health gives another one? In one case, the ministry of health estimate for contraceptive prevalence was twice as high as the estimate from the Demographic and Health Survey for that country. Other health indicators differed by similar amounts. Decision makers would be rightfully cautious about using these estimates.

Individual constraints. Many information systems suffer from shortages of:

- ❑ Skilled people to manage, interpret and use the data.
- ❑ Guidelines and forms to establish systematic protocols for data collection.
- ❑ Motivation and incentive to generate high-quality data, or to rely on data to make decisions instead of just consulting with supporters and colleagues.

In short, there are many reasons that available data is not being used for anything more than filing reports. Some of those reasons might be insurmountable, but if you know what they are, you can at least account for them. Other barriers and constraints *can* be resolved, and the following rapid assessment tool can help lead the way.

Description

What does this tool do?

Identifies the barriers and constraints to data use, and leads to effective approaches to address them.

The Assessment of Data Use Constraints is a tool for rapid assessments—primarily a guide for interviewing key informants—that serves three key purposes:

- ❑ Identifies existing barriers and constraints to data use.
- ❑ Identifies existing best practices in data use, so these practices can be applied elsewhere.
- ❑ Helps in designing and prioritizing approaches for addressing the barriers and constraints.

The assessment is made by interviewing key informants at various levels, such as national and district-level policymakers and program managers from the public and private sectors. This document includes a sample questionnaire to guide these confidential interviews. The consultant then creates a report that summarizes and synthesizes the findings.

The Assessment of Data Use Constraints can be applied at the national, sub-national (district) or organizational level. When the assessment looks at information processes within a single organization, it can be incorporated into health information and organizational capacity-building assessments at the national and sub-national levels.

Identify the barriers and constraints to data use.

This assessment tool looks at organizational, technical or individual constraints to answer questions about deficiencies in data use: Why are monitoring and evaluation (M&E) systems not producing all the real-world value they could? Why are findings inconsistent among different reporting entities? Where are the disconnects that prevent information sharing among decision makers?

For example, one health information unit, despite having an M&E system for HIV/AIDS, was still not getting the data it had requested from the field and from its service sites. Where was the problem? Why were the data not properly reported?

In another case, a ministry of health discovered that its estimates of infant mortality differed greatly from estimates provided by international donor organizations. When researchers traced estimates to original data sources, and investigated the methods used for calculating those estimates, they were able to determine which figures should be used for reporting and decision making.

Identify existing best practices in data use.

Although the tool is called Assessment of Data Use Constraints, the analysis will also reveal areas where the information flow is working *well*, which could serve as a model for improvements in other initiatives. For example, a U.S. government team shared its data with all implementing partners in a program designed to reduce maternal-to-child transmission of HIV/AIDS. Moreover, they not only shared country-wide summaries; they disaggregated the data in a way that was meaningful to each partner. Each health facility received information specific to its locale, so staff could understand their own performance *and* the broader context.

This information-sharing practice has many positive effects:

- ❑ Eliminates duplication of data reporting.
- ❑ Ensures that reports used standard definitions.
- ❑ Increases confidence in data among implementing partners.
- ❑ Increases use of data for planning future programs.
- ❑ Helps people appreciate the importance of their role in data processes.

Provide essential knowledge for addressing constraints and barriers.

The assessment generated by this tool should be far more than a list of barriers and constraints. It should be forward-looking and prescriptive, showing ways that these obstacles and deficiencies can be overcome. This goal explains why the tool focuses on organizational, technical and individual constraints. These are areas that can usually be addressed with targeted interventions. Outside of these areas, there is a broader environment of political, economic and social issues that might be inescapable realities.

Once you know the barriers and constraints in an information system, you can plan M&E systems to either change what you can change, or acknowledge (and work around) what you cannot change.

For instance, before embarking on an intensive data collection effort, a researcher might first facilitate discussions to sensitize stakeholders about the importance of surveillance and M&E systems to create awareness and obtain buy-in. If there are constraints in areas that cannot be influenced, such as a shortage of a healthcare commodity or budget in general, the study can be designed to navigate around or account for that inflexible constraint.

Audience

Who should use this tool?

Key people involved in collecting, analyzing, reporting or using health information

The tool has two principal sets of users, each with unique roles in using the tool:

(1) Consultants from MEASURE Evaluation and/or other technical assistance agencies:

- Use the tool to guide the process of interviewing key informants.
- Through the interview process, identify existing uses of data, and constraints and barriers to data use.
- Create a report that presents the findings of the interview process.
- Use the report findings to help design improvement interventions.
- Share this report with program managers who would implement these interventions.
- Incorporate this tool into training programs for host-country M&E staff, to help them think more strategically about data use and constraints.
- Incorporate key questions from this interview process into other formal and informal assessment methodologies.

(2) Host-country program managers and other stakeholders:

- Adapt the questionnaire to best reflect their unique circumstances for using data.
- Through interviews, share their knowledge of barriers and constraints to data use, and how they have worked with these constraints in the past.
- Use findings of the assessment to influence the design of interventions.

Timing

When would this tool be used?

There is never a bad time, but certain circumstances would trigger this activity.

The Assessment of Data Use Constraints can prove useful at any time, but several conditions may trigger a need for an assessment:

A national M&E framework is being designed. An external agency might be developing an M&E framework for HIV/AIDS programs for a region. Knowing the existing barriers and constraints to data use, the M&E design can include plans to resolve the organizational, technical and individual issues that can be changed—and account for the political, economic and cultural conditions that cannot be changed.

Existing information is underutilized. M&E specialists or other data managers might wish to see greater use of data resources they have created. An Assessment of Data Use Constraints can help identify why data are not being used, and what to do about it.

A new data collection activity is being planned. The Assessment of Data Use Constraints ensures that the planned research activity will produce quality, relevant information that will be available and used by decision makers.

Additionally, MEASURE Evaluation representatives might identify a need based on their knowledge of external agency activities or in-country conditions.

Applications

Who has already used this tool?

Representative field applications

Nigeria – September 2005

Assessment for design of MEASURE Evaluation program activities

A host-country consultant from the Centre for Research, Evaluation Resources and Development conducted an assessment to support the design of MEASURE Evaluation program activities in Nigeria. The interview process included key informants at the national, state and local levels from public health agencies and non-governmental organizations (NGOs).

This analysis revealed practical and often culture-specific nuances that might not have been evident from an outsider's perspective. For example, what depth of data expertise would you expect of an individual with a Bachelor's degree? Do the people involved in data collection understand and care about the importance of their work?

The findings influenced the way MEASURE Evaluation prioritized activities. Training had been planned all along, but it now received much higher priority because the assessment showed a notable shortage of data management skills.

South Africa – Fall 2004

Regional HIV/AIDS training programs

MEASURE Evaluation adapted the Assessment of Data Constraints tool to serve as a module in a training program for NGOs involved in regional HIV/AIDS prevention programs. Through formal workshops, participants used this tool to design action plans to improve data use within and among their organizations.

About this document

What is in this tool guide?

Tool description, interview questionnaire, guidelines and process, respondent log and report template

In this document, you will find descriptions of:

- The purpose, audience and typical applications for this tool.
- Guiding principles of the methodology and tips on interview process.
- Guide and questionnaire for interviewing key informants.

- ❑ Template and sample respondent log.
- ❑ Outline for a standard assessment report.
- ❑ Systematic process for conducting the assessment.
- ❑ Checklist to use in implementing the process.

Guiding principles

The Assessment of Data Use Constraints approach

Issues and considerations for using this tool

The tool focuses on organizational, technical and individual constraints.

The practical utility of health information—how often and how effectively it is used—depends on three immediate factors: the attitudes and actions of people who produce or use data, the technical aspects of data processes and tools, and the organizational context that supports (or inhibits) data processes. This tool focuses on these categories because issues in these areas can usually be addressed with targeted interventions.

The interview process should include a range of key informants.

This assessment focuses on decision maker perceptions about constraints and barriers that hinder the ability to make evidence-based decisions. “Decision makers” are defined here as individuals responsible for decisions on policies or operational protocols and guidelines, on project designs and plans, and on resource allocation.

Here are some guidelines for selecting the key informants for a typical assessment of an M&E framework for a national program:

- ❑ A typical assessment process should include interviews with 20 to 25 individuals.
- ❑ Up to two-thirds of these people can be from the national level, but at least one-third should represent the provincial or district level.
- ❑ One-half of informants should be from the public sector, including the ministry of health and related parastatal organizations, including national population councils or national AIDS commissions. The other half should include decision makers from the NGO sector (for example, program managers or executive director from the national family planning NGO, and directors of mission hospitals) and from the private sector (private hospitals, industry executives from companies that provide health services to their workers).
- ❑ The list should include policymakers and program managers in the health sector or a related position in finance or planning.

Although donor representatives also make decisions, this assessment focuses on host-country public- and private-sector decision makers. This is not intended to be a comprehensive survey; the objective is to locate individuals who can contribute informed perspectives about constraints and barriers to data use, and how to address those issues.

Using these criteria, the consultant may choose key informants to interview on an opportunistic basis.

For example, to minimize travel costs, provincial and district representatives may be approached for an interview when they are in the capital city on another assignment.

The Assessment of Data Use Constraints tool is adaptable.

This tool can be used in a stand-alone assessment or as a component of a larger assessment—or parts of it can be extracted to serve specific purposes. In addition, the questionnaire itself is adaptable. In fact, you should customize the questionnaire to the environment and scope of the assessment. For example, an assessment of a national survey program would focus on barriers and constraints to using a particular set of national survey data. An assessment of one organization would include different questions than an assessment of a regional or national M&E framework.

Adapt the questionnaire at the outset, then conduct two or three pilot interviews, and fine-tune the questionnaire again based on those initial experiences.

Standardize the interview process within an assessment.

The questionnaire will be customized to suit different assessments, but within one assessment, you should use a consistent questionnaire and standard process for guiding the interviews. Consistency of process will deliver more useful results and enable fair comparisons of perspectives among informants.

The interview process demands confidentiality and consent.

The process expects a core group of people to be very open with their opinions and perceptions about potentially sensitive topics, such as deficiencies in their organization, problems with existing processes, or concerns about government policies.

The interviewer can only earn the candor of informants by securing their consent and guaranteeing anonymity. Be sure informants know that their responses will be modified to eliminate any identifying information, their titles will be made generic, such as “public health official,” and reporting on constraints will not identify particular individuals or agencies.

Encourage respondents to think proactively about possible resolutions.

The interview process should not focus solely on identifying constraints, but should also encourage respondents to think positively about approaches for addressing those constraints. It is very easy for respondents to list things that are wrong with the system, but as a facilitator, you will have to help them think about resources within their organizations that can be organized or leveraged for improvements.

Not all constraints can be resolved, but they can be addressed.

If a constraint is an individual one—for example, data collectors do not know to use correct methods—the issue can be resolved with training. Technical constraints can be resolved with additional computing resources or data management protocols. Organizational constraints can often be resolved with changes in policy.

However, in the greater context, there are other constraints that probably cannot be easily resolved, but at least they can be addressed:

Economic constraints. “We wish we could gather survey data at the district level, but it would be prohibitively expensive to do so.” “Data analysis would show that more people should receive anti-retroviral therapy, but funding is limited.”

Political constraints. “Knowledge is power, so some departments are hoarding it.” “Our division head doesn’t want authorities to know the severity of this health issue in our district, for fear of disrupting the tourist industry.”

Socio-cultural constraints. “Salary decisions used to be based on detailed economic surveys, but now it’s just a political debate between the workers’ union, the courts and the agency.” “The head of that program is under pressure from a multinational corporation to support its agenda.”

In one assessment, a public health officer said, “There is so much influence from political figures to the point of manipulating health officers to cheat on data so as to get more government resources.” A district statistical coordinator in the same assessment said, “To a large extent [these factors] result in having most decisions not based on empirical data but focused on the narrow social, political, and economic interests.”

These types of constraints will not be resolved by the kinds of interventions that are within the scope of this tool. However, acknowledging that these circumstances exist can be very helpful for designing programs that work with or navigate around these constraints.

Key Informant Interview Questionnaire

Assessment of Data Use Constraints

Decision maker perceptions

| Interview logistics | | |
|--|----------|----------------------------------|
| Date: | | |
| Time Start/End | Start: | End: |
| Interviewer Name: | | |
| Title of Respondent: | | |
| Number of Years in this Position: | | |
| Specialization: <i>(circle all that apply)</i> | A. | Population, Health and Nutrition |
| | B. | Child Survival |
| | C. | HIV/AIDS |
| Level: | National | District |
| Responsibilities: <i>(circle all that apply)</i> | Policy | Program |
| Sector <i>(circle one)</i> | Private | Public |

| About this interview—and why your participation is so important |
|--|
| <p>In health information systems, the ultimate purpose of collecting and analyzing data is to improve programs by enabling more informed decisions based on facts. However, information is not always available to make decisions—or if it is available, it is not always used. This study is designed to find out what barriers and constraints are causing these conditions, and how to resolve them.</p> <p>Your participation is requested to provide your insights about constraints and barriers to data use. Your participation is very important to this research, but it is entirely voluntary. Your responses will be treated as confidential, and we will ensure that any statements or comments you make cannot be linked either to you as an individual or to your organization. We will be producing a report that is intended mainly to help MEASURE Evaluation staff and our collaborating organizations design effective monitoring and evaluation activities.</p> <p>Are you willing to participate? YES <input type="checkbox"/> NO <input type="checkbox"/> (stop interview)</p> |

| Introductory questions | |
|------------------------|---|
| RA1 | What was the last major decision related to policies or programs that you made? |
| RA2 | What information did you use to make this decision? |
| RA3 | How did you use information to make this decision? |
| RA4 | Was there any information you needed but did not have in order to make this decision? |
| RA5 | Who are the primary stakeholders in the use of information? |
| RA6 | Whose interests are most served by health information systems? |
| RA7 | How do health information systems meet your needs for information? |

| Technical constraints | |
|--|--|
| Technical constraints are related to the ability to generate high-quality data and analyses. | |
| RA8 | Have you ever had an experience while making a policy- or program-related decision when you were concerned about the quality of the information being used? |
| RA9 | Are there multiple sources of information or statistics for issues of importance to you, and have you experienced any problems caused by having different estimates? |
| RA10 | I am interested in knowing about technical capacity for collecting and using information. Does your agency have the technical capacity to produce reliable information without a lot of external technical assistance? |
| RA11 | Does your agency have the technical capacity to ensure access to and availability of reliable data? |
| RA12 | Has there been an occasion when data quality or local technical capacity made it difficult for you to use information in making a decision? |
| RA13 | How would you have gone about preventing this situation? |

| Individual constraints | |
|---|--|
| Individual constraints are related to the capacity of staff to collect, analyze and interpret the data. | |
| RA14 | <p>What specific challenges have you experienced among your staff when it comes to using data?</p> <p>Probe respondent for the following items following their response: awareness of data sources, technical skill, motivation, time and workload, lack of incentives or knowledge of the benefit to using data for policy change and program management.</p> |

| Organizational constraints | |
|---|--|
| I am interested in finding out about challenges in using information that are due to how your organization functions. | |
| RA15 | How does your organization support having the necessary information to make decisions? |
| RA16 | How does your organization support the prioritization and use of information in decision making? |
| RA17 | How does your organization support training of staff in skills for using information in decision making? |
| RA18 | Can you describe the mechanism or process within your organization/agency for approving research or survey data for dissemination? |
| RA19 | How does this process affect your ability to use information to make decisions? |
| RA20 | What are the challenges your organization/agency experiences in sharing survey and research data? |
| RA21 | What are the challenges you experience in sharing research and survey data across organizations and agencies? |
| RA22 | <p>Are there risks associated with sharing information? If so what are they?</p> <p>Record the response and the respondent's openness or reluctance to answering this question</p> |

| Closing thoughts | | |
|------------------|--|---|
| RA23 | How does the political, social and economic environment affect your use of information in decision making? | <i>Probe respondent for various influences including the following:</i> <ul style="list-style-type: none">- international priorities- NGO funding and donors |
| RA24 | To what extent do these factors outweigh the importance of data itself in making decisions? | |
| RA25 | Have you experienced any other challenges in using information to make decisions? | |

Sample of a completed interview transcript

Assessment of Data Use Constraints

Decision maker perceptions

| Interview logistics | | | |
|---|------------------------------------|----------------------------------|-------|
| Date: | August 30, 2005 | | |
| Time Start/End | Start: 11:36am | End: 12:22pm | |
| Interviewer Name: | A. A. | | |
| Title of Respondent: | Director, Public Health Department | | |
| Number of Years in this Position: | 5 years | | |
| Specialization: (circle all that apply) | A. | Population, Health and Nutrition | |
| | B. | Child Survival | |
| | C. | HIV/AIDS | |
| Level: | National | State | Local |
| Responsibilities: (circle all that apply) | Policy | Program | |
| Sector (circle one) | Private | Public | |

| About this interview—and why your participation is so important |
|--|
| <p>In health information systems, the ultimate purpose of collecting and analyzing data is to improve programs by enabling more informed decisions based on facts. However, information is not always available to make decisions—or if it is available, it is not always used. This study is designed to find out what barriers and constraints are causing these conditions, and how to resolve them.</p> <p>Your participation is requested, to provide your insights about constraints and barriers to data use. Your participation is very important to this research, but it is entirely voluntary. Your responses will be treated as confidential, and we will ensure that any statements or comments you make cannot be linked either to you as an individual or to your organization. We will be producing a report that is intended mainly to help MEASURE Evaluation staff and our collaborating organizations design effective monitoring and evaluation activities.</p> <p>Are you willing to participate? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> (stop interview)</p> |

| Introductory questions | |
|------------------------|--|
| RA1 | <p>What was the last major decision related to policies or programs that you made?</p> <p>The last was the immunization program.</p> |
| RA2 | <p>What information did you use to make this decision?</p> <p>We used data supplied by the LGAs to determine (1) the number of eligible children in the state, (2) the quantity of vaccine that is needed for the immunization. We generated data from the field. M&E officers at the local governments visited health facilities to collect data which was sent to us and we tried to analyse it.</p> |
| RA3 | <p>How did you use information to make this decision?</p> |

| | |
|-----|---|
| RA4 | <p>Was there any information you needed but did not have in order to make this decision?</p> <p>The reports that came were actually sufficient to make the decision.</p> |
| RA5 | <p>Who are the primary stakeholders in the use of information?</p> <p>The primary stakeholders are the people in the community who are affected by the decisions that we take. Others include the policymakers and our partners like WHO and UNICEF.</p> |
| RA6 | <p>Whose interests are most served by health information systems?</p> <p>The community.</p> |
| RA7 | <p>How do health information systems meet your needs for information?</p> <p>In the last 2-3 yrs, the Health and Human Services Secretariat (the equivalent of a state ministry of health) had tried to strengthen the health information system. We have been able to acquire computers, train people on the use of forms used in collecting data. There were initial complaints about the NHMIS form, that it is too voluminous with too many sections on immunisation, family planning, malaria treatment, etc. and that for one person to complete this is too much.</p> <p>We have to train these workers on how to complete this form, as it is our main source of data. Most of the health workers at the local facilities have no serious educational training, so it is a problem for them to correctly use the NHMIS forms without the training. After we have embarked on capacity building in this regard, our needs for data is being met through this method.</p> |

| Technical constraints | |
|-----------------------|--|
| RA8 | <p>Have you ever had an experience while making a policy or programme related decision when you were concerned about the quality of the information used?</p> <p>Yes, those NHMIS forms were designed without input from the grassroots. Interpreting the forms correctly have been problematic for health workers who are mostly primary school or secondary school leavers. Therefore, the data that they are generating is sometimes doubtful, and that is why we embarked on training them.</p> |
| RA9 | <p>Are there multiple sources of information or statistics for issues of importance to you, and have you experienced any problems caused by having different estimates?</p> <p>Yes, we have different sources from various LGAs, but there have not been problems caused by having different estimates.</p> |
| RA10 | <p>I am interested in knowing about technical capacity for collecting and using information. Does your agency have the technical capacity to produce reliable information without a lot of external technical assistance?</p> <p>Not much technical capacity within the organisation itself really, but we have been receiving much assistance from agencies like WHO, UNICEF, and other consultants.</p> |
| RA11 | <p>Does your agency have the technical capacity to ensure access to and availability of reliable data?</p> |
| RA12 | <p>Has there been an occasion when data quality or local technical capacity made it difficult for you to use information in making a decision?</p> <p>Yes, we have such cases. There was an occasion when a report was sent from an LGA and I saw an incidence of smallpox. A serious matter like that requires urgent attention because the disease was thought to have been eradicated. I summoned the HOD in charge of health in the LGA (who is a medical doctor) to go and confirm the reported case. By the time he returned to brief me, he found that the doctor actually diagnosed chickenpox, but the local officer responsible for sending data to the state headquarters recorded smallpox. Such a case can make you think twice in using data collected by certain category of staff and that again bothered me on the quality of staff collecting/ recording various statistics in the health facilities. I have to warn that if anybody do not understand the handwriting of the health official who made certain diagnosis, clarification should be sought from the officer rather than assume and record just anything. That every information they forward is being scrutinised and not just dumped on the shelf. We asked them to do the job for specific reasons, but they seem not to understand how important the job they are doing is.</p> |

| | |
|------|--|
| RA13 | <p>How would you have gone about preventing this situation?</p> <p>Preventing this situation requires training the staff adequately. If you do not understand what the health officer had diagnosed, it is important for you to confirm rather than just record anything. It seems they do not know the importance or value attached to every piece of information they send in.</p> |
|------|--|

Individual constraints

Individual constraints are related to the capacity of staff to collect, analyse and interpret the data.

| | |
|------|---|
| RA14 | <p>What specific challenges have you experienced among your staff when it comes to using data?</p> <p>I was talking about the technical ability of the DSNOs (Disease Surveillance and Notification Officers). He should be a person who can investigate disease outbreak. The main challenge has been the technical qualification of those collecting and sending data to us. A problem we are still grappling with is educating the workers on the reason why they are collecting the data. They should not be collecting the data without first knowing the reason or how vital the job is. I think I once discussed that our M&E officers has to be trained on data management. Many of our M&E officers cannot even use computers. People need to know why we are collecting data and why we must have correct data.</p> |
|------|---|

Organizational constraints

Challenges in using information that are due to how the organization functions

| | |
|------|---|
| RA15 | <p>How does your organization support having the necessary information to make decisions?</p> <p>The Public Health department is replicated in the LGAs, called the PHC departments. These units are headed by medical doctors. The Secretary of Health and Human Services always request that any recommendation that we forward should be backed by data. This is the only way to ensure that decisions on outbreaks of diseases or other health issues are based on facts.</p> |
| RA16 | <p>How does your organization support the prioritization and use of information in decision making?</p> |
| RA17 | <p>How does your organization support training of staff in skills for using information in decision making?</p> <p>Yearly, our budget includes funds for training and health capacity building. We regularly train our staff internally and sometimes overseas. About 2 or 3 of our staff were sent overseas for training and they have returned here to continue to work for us. We also employ staff for the area councils that are short of manpower in key areas.</p> |
| RA18 | <p>Can you describe the mechanism or process within your organization/agency for approving research or survey data for dissemination?</p> <p>Dissemination of research data is very important, because if you collect data or do research without disseminating the result, you have done nothing. What we do is to send data for all necessary agencies and the FMH, e.g., immunisation data is sent to both the FMH and the NPI. We also share information with UNICEF and WHO—both have been very strong partners working with us. There are no strict bureaucratic procedures for approving survey data, for dissemination. Apart from forwarding such data to the FMH, I also have the liberty to take immediate steps in ensuring that the data get to all necessary end users, especially if immediate action on certain issues needed to be taken for instance to curtail/prevent an outbreak of disease.</p> |
| RA19 | <p>How does this process affect your ability to use information to make decisions?</p> |
| RA20 | <p>What are the challenges your organization/agency experience in sharing survey and research data?</p> <p>There are really no serious challenges except where very sensitive issues are involved. In such cases, you may need the approval of the appropriate ethical committee to be able to release certain information for public consumption and sometimes you need to obtain clearance from your supervisors. But largely, there are no serious challenges.</p> |

| | |
|------|--|
| RA21 | What are the challenges you experience in sharing research and survey data across organizations and agencies? |
| RA22 | Are there risks associated with sharing information? If so, what are they? (Paused) I would not say there are no risks. But I think the most important thing is to ensure that information that you share is not likely to cause undesirable effects, I have to be very sure of my facts and be certain before I can release any information. |

Closing thoughts

| | |
|------|---|
| RA23 | How does the political, social and economic environment affect your use of information in decision making? Have not encountered problem politically or socially. I remember however that there was a time when river blindness was a serious illness in the country because people were afraid of moving to certain parts of the country for fear of the disease. Although consultants from the University were already making progress on addressing the issue then, it was seriously politicised and hence, we cannot just go on air to release any information that we have about the disease. We have to carefully manage things. Apart from that, there is no serious issue that cannot be discussed. |
| RA24 | To what extent do these factors outweigh the importance of data itself in making decisions? |
| RA25 | Have you experienced any other challenges in using information to make decisions? |

Respondents Log

Assessment of Data Use Constraints

Decision maker perceptions

Assessment: _____

Country: _____

Consultant: _____

Complete this form by inserting the information requested in each column. Insert a new row if you interview more than 20 individuals. For assistance or clarification, contact MEASURE Evaluation at measure@unc.edu.

| | Title of respondent | Level of government | Type of position (program or policy) | Specialization (PHN, HIV/AIDS, CH/N/M) | Consent Given |
|----|----------------------------|----------------------------|---|---|----------------------|
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
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| 15 | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |

Sample of a completed respondents log

Assessment of Data Use Constraints

Decision maker perceptions

Assessment: [Title of Assessment Activity]

Country:

Consultant: A.A

Complete this form by inserting the information requested in each column. Insert a new row if you interviewed more than 25 individuals. This form must be typed and should be returned with the data analysis matrix as well as annexed in the final report.

For assistance or clarification, contact MEASURE Evaluation at measure@unc.edu.

| | Title of respondent | Level of government | Type of position (program or policy) | Specialization (PHN, HIV/AIDS, CH/N/M) | Consent Given |
|-----|---|----------------------------|---|---|----------------------|
| 1. | Director, Gender and Social Policy Studies | (NGO) | Policy/programme | PHN | Yes |
| 2. | Programme Officer | (NGO) | Programme | PHN, HIV/AIDS | Yes |
| 3. | Programme Officer, M&E | (NGO) | Programme | PHN, HIV/AIDS | Yes |
| 4. | Director, Public Health | Local | Programme | PHN, HIV/AIDS, CH/N/M | Yes |
| 5. | Principal Records Officer, M&E | Local | Programme | PHN, CH/N/M | Yes |
| 6. | Programme Coordinator, Immunisation | Local | Programme | PHN, HIV/AIDS, CH/N/M | Yes |
| 7. | Programme Manager | Local | Programme | HIV/AIDS | Yes |
| 8. | Programme Manager, IMCI | Local | Programme | CH/N/M | Yes |
| 9. | Supervisory Counsellor, Health | Local | Policy/Programme | PHN, HIV/AIDS, CH/N/M | Yes |
| 10. | Director, Development and Population Activities | National | Policy | PHN | Yes |
| 11. | Director, M&E | National | Programme | HIV/AIDS | Yes |
| 12. | Director, Policy | National | Policy | HIV/AIDS | Yes |
| 13. | Programme Officer, Nutrition | National | Programme | PHN, CH/N/M | Yes |
| 14. | Programme officer, M&E | National | Programme | HIV/AIDS | Yes |
| 15. | Chief Environmental Health Officer | State | Policy/program | PHN, CH/N/M | Yes |

Report outline

Template for Assessment of Data Use Constraints final report

Contact MEASURE Evaluation for a Microsoft Word template of this report format.

Cover page: Report title, date and author

A Rapid Assessment of Data Use Constraints

Decision-maker Perceptions among Key Informants in [Country]

[Date] - [Author]

Report content:

Abbreviations and acronyms used in the report

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Executive summary

Background and objectives

Purpose of the study

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1. Interpretation of the findings
2. Importance of the results to others thinking about the problem

Conclusions and recommendations

1. Implications of findings
2. Next steps

Process Action Plan**For conducting and reporting an Assessment of Data Use Constraints***Five steps***Step 1. Perform pre-assessment planning.**

This step relies on communication with MEASURE Evaluation representatives (or other external consultants) in-country.

- 1.1 **Identify a potential need or opportunity.** Communicate with host-country counterparts to identify opportunities where an Assessment of Data Use Constraints can be beneficial. Sometimes the opportunity becomes clear when a consultant is asked to develop an M&E framework, implement a new data collection process, or discover why existing datasets are not being utilized.

An assessment can also identify practical applications of new datasets as they become available. The opportunity is often brought to light by MEASURE Evaluation colleagues and host-country counterparts. They can help determine an appropriate time to engage in this activity and help make introductions with in-country informants and stakeholders.

- 1.2 **Determine the scope of the assessment.** Will you be looking at data use constraints within an organization, or at the national or sub-national level? What types of informants would be appropriate to include?
- 1.3 **Coordinate with key development partners,** including your U.S.-based and in-country colleagues, to define a preliminary plan for selecting and interviewing key informants, as well as an achievable timeline for performing the assessment.
- 1.4 **Write an internal summary of the planned activity.** This document could be as simple as an email or one- or two-page proposal, which could describe:

- The need identified in Step 1.1.
- How you will provide technical support to address that need.
- How this activity fits into your organization's priorities and workload.
- The preliminary list of informants and how they will be engaged.
- A high-level outline of process steps and timeline for project milestones.

Review this plan with the contributors from Step 1.3, and incorporate their feedback.

- 1.5 Get the necessary approvals from the sponsoring organization(s), according to your organization's protocol, to proceed with the assessment.

Step 2. Engage a senior national consultant to perform the assessment.

The assessment could be performed by a MEASURE Evaluation representative or other U.S.-based consultant, but the process tends to be more effective and produce more robust results when conducted by a host-country national—particularly one with the seniority to be respected by high-ranking key informants. Compared to a U.S.-based consultant, a host-country consultant is more likely to:

- Have more intimate knowledge of the cultural and political environment.
- Know the informants and have better access to them for interviews.
- Gain the confidence and candor of key informants, to solicit more meaningful responses.
- Conduct the process cost-effectively, since it may be impossible to schedule all the interviews within the short period of an external consultant's visit.

Step 3. Meet with project stakeholders and development partners.

The usefulness of the assessment depends partly on ensuring that the people who are designing M&E programs and other data-management activities have some sense of ownership in the process and confidence in its findings. That means good relationships and buy-in are essential and should be cultivated from the start.

Convene a core group of three to six stakeholders who have technical expertise and knowledge of the policy environment. This group might include a director of M&E for a national program, program managers from national country government projects, and representation from implementing partners in development organizations.

In this meeting, the group will:

- **Define a preliminary list of 20 to 25 key informants.** Determine the types of people who should be interviewed, and organizations or roles they should represent. List any specific individuals who should be included.
- **Adapt the questionnaire as necessary** to suit the dataset, institution, or information processes being assessed. You will later test this questionnaire with two or three pilot interviews and fine-tune it if necessary.

Step 4. Conduct and document the interviews.

- 4.1 **Set up appointments to interview the key informants** identified in the previous step. Plan on 45 minutes to an hour for each interview. These interviews can take place on an opportunistic basis. For instance, if you need to interview a mix of national, district and regional-level representatives, it can be convenient to meet with them when they travel to the capital for a training program, regular meeting or national conference.

4.2 Conduct the interviews, following the questionnaire that was adapted in Step 3.

The interview should take place in a secure environment—a location where the interview will not be disturbed or overheard by outsiders.

Secure the participant's consent. The cover sheet of the questionnaire includes a checkbox for the participant to note consent. Read the introduction to the respondent, which explains the purpose and methodology of the assessment, and have the participant indicate his/her consent (the checkbox is sufficient; a signature is not necessary).

Follow best practices for interviewing. For example:

- ❑ Begin with question #1 in the questionnaire, but the rest of the interview does not have to rigidly follow the order of questions. You may find the conversation naturally drifting to questions out of order, and this is perfectly acceptable.
- ❑ Encourage open discussion, and allow the respondent to talk freely without interruption until you see a good opportunity to move on to the next question. You can leave a copy of the questionnaire behind with the respondent.

Wherever possible, it is better to delve into the specific reasons there was a constraint, and provide specific examples of cases where data was not used to make a decision, and why not.

- ❑ If the respondent doesn't address sub-questions in the natural flow of discussion, solicit this information by using non-leading prompts, such as: "How do you mean?" ... "In what way?" ... "What other methods/ways do you know of?" ... "There is no hurry. Take a moment to think about it, and tell me all that comes to mind." These prompts above solicit more detail without influencing the response.

In contrast, these are examples of leading probes not to use: "Do you mean –?" ... "You do not mean that –?" ... "Are you saying that –?" ... "Is that the only thing you can think of?" Leading prompts will skew the responses to reflect the interviewer's perceptions and bias.

It is not necessary for each informant to answer every sub-question. The focus should be on recording their good ideas and examples of constraints and barriers. The follow-up questions are only needed when leading to more specific examples.

Record the respondent's answers. The interviewer can audiotape the interview if desired, but this is not required, and can even inhibit open discussion. In most cases, the interviewer references the questionnaire and takes careful and detailed notes on a separate piece of paper. A verbatim transcript is not necessary, since the goal is to capture key insights.

4.3 Type out the notes from the interview. After the interview—preferably within two to four hours—type out the notes from the interview, sorting the notes to fit into the questionnaire format. If there were useful parts of the interview that fell outside the scope of the questionnaire format, include these notes at the bottom of the page.

Step 5. Analyze and report the findings.

When you have conducted and documented all the interviews, prepare a report (approximately 10 pages) that summarizes the findings and recommendations.

This report should follow the outline provided earlier in this document, incorporating your interpretations and conclusions. If you prefer to create the report by computer—which is recommended and preferred—you can download a Microsoft Word template of the report format from the MEASURE Evaluation Web site, <http://www.cpc.unc.edu/measure>.

The complete report package will include the following elements:

- A typed list of respondents, following the template provided in this document.
- Cover sheets from the questionnaire for each interview, showing that consent was given.
- Typed notes from each interview, in the questionnaire format.
- The final report summarizing findings, in the suggested outline/template.

The report should include a concise executive summary that can be shared with senior decision makers. Below is a sample executive summary from a 2005 assessment:

Executive Summary

The study is a rapid assessment of the perceptions of decision makers on the use of data and obstacles to data use. Respondents were drawn from the health sector and included 20 federal, state and local officials who were involved in decision making or programme management in three main areas, namely, (i) population, health and nutrition (ii) child survival, and (iii) HIV/AIDS at either the national, state or local level.

The study found that many decision makers had no clear understanding of how policies were formulated. It was also found that the organizational structures that were in place in these agencies were a constraint on efficient data management processes as it made the lower levels in the administrative hierarchy (local and state agencies) almost entirely dependent on the officers at the national level for analysis and interpretation of the information that they collected.

Most of the lower level staff were poorly trained and unable to even interpret data. The training, where provided, was often ad hoc and could not be sustained. Moreover, those who were trained do not always have the environment to put into use whatever training they might have been given due to lack of necessary facilities in their offices. The lack of technical capacity to generate and use data is thought to be an important constraint on the availability of current national data in the country and an obvious impediment to efficient policymaking. The study also highlighted poor funding and socio-cultural/political interference as factors hindering data generation, policy formulation and programme implementation.

The study recommended a serious re-orientation of both the decision makers and the entire staff of these agencies. The study also recommended training the decision makers at both state and national levels on skills necessary to use information for decision making, and on the significance of good data management to efficient policymaking and programme management. Finally, the government is urged to accelerate the development of the country's National Health Management Information System (NHMIS) into a credible and readily accessible databank as a way of avoiding duplication of data generation by various agencies thereby reducing cost and time spent on acquiring data for policy formulation.

In preparing the report, be sure to fully respect the confidentiality of the key informants. It is important that statements and comments and examples not be linked, even indirectly, to specific individuals or small groups.

Step 6. Share the findings with stakeholders.

Convene the core group of stakeholders who helped design the assessment activity, and share the findings with them. In this meeting, the group will:

- Define a strategy for disseminating the findings** to a broader audience. For example, you might know of a group that is initiating a new research activity; this group could receive the assessment to help improve the design of their activity or use of the data they collect.
- Develop a list of recommendations and actions** for resolving barriers and constraints. This information will have immediate applicability, but it will also contribute to a broader national and international understanding of how to improve data use.

Checklist

For performing an Assessment of Data Use Constraints

Summary of the Process Action Plan.

Photocopy this checklist to use as a reference for the process steps. This checklist ensures that a systematic approach and best practices have been followed.

- Step 1. Perform pre-assessment planning.**
 - 1.1 Identify a potential need or opportunity.
 - 1.2 Determine the scope of the assessment.
 - 1.3 Coordinate with key development partners to define approach.
 - 1.4 Write up an internal summary of the planned activity.
 - 1.5 Get the necessary approvals from the sponsoring organization(s).
- Step 2. Engage a senior national consultant to perform the assessment.**
- Step 3. Meet with project stakeholders and development partners.**
 - Define a preliminary list of 20 to 25 key informants.
 - Adapt the questionnaire as necessary.
- Step 4. Conduct and document the interviews.**
 - 4.1 Set up one-hour appointments to interview key informants.
 - 4.2 Conduct the interviews, following the adapted questionnaire.
 - Get the participant's consent.*
 - Follow best practices for interviewing.*
 - Record the responses.*

- 4.3 Type out the notes as soon as possible after the interview.
- Step 5. Analyze and report the findings.**
 - Typed list of respondents (in the Respondents Log template).
 - Cover sheets from interview questionnaires, showing consent.
 - Typed notes from each interview, in the questionnaire format.
 - Final report with executive summary, in the suggested outline/template.
- Step 6. Share the findings with stakeholders.**
 - Define a strategy for disseminating the findings to a broader audience.
 - Define and prioritize approaches for addressing barriers and constraints.

Conclusion

Promoting better data use to benefit more programs and people

Identify and resolve the barriers and constraints to using data to improve programs with evidence-based decisions.

In complex decision-making environments, influenced by multiple internal and external pressures, it can be extremely difficult to follow best practices for data collection and use.

Often, valuable data resources remain unused, when they could yield better decisions that improve the effectiveness of programs and organizations, and in turn benefit the lives and health of more people.

What are the barriers and constraints? There are many reasons that available data might be used for little more than filling reports.

Sometimes the constraint is *organizational*; the processes and culture do not support data use. Often, the issue is *technical*; data quality is suspect, so people do not have confidence using that data to make decisions. Very often, the constraint is *individual*, a shortage of skills or incentive to create high-quality data and analysis—prerequisites for data to be useful.

In the broader perspective, there will always be political, economic and socio-cultural constraints at play. Data might be available to support evidence-based decisions, but political influence, financial realities and cultural bias intervene. Such constraints might be fixed realities, but if they are identified and acknowledged, they can at least be accounted for when planning information systems.

On the other hand, organizational, technical and individual constraints generally *can* be resolved—through policies, procedures, awareness, skills-building and other interventions. This is where the Assessment of Data Use Constraints tool proves its value. It provides a systematic methodology for identifying—and resolving—the barriers and constraints that would inhibit data use.

Acknowledgments

The Assessment of Data Use Constraints tool was created by Alan Johnston and Shannon Salentine, specialists on the Data Demand and Information Use (DDIU) team of MEASURE Evaluation, with assistance from Charles Teller at USAID, Roger Schimberg at Tulane University, and Scott Moreland and Karen Foreit at Constella Futures.



Information Use Mapping

An assessment tool for identifying opportunities
for feedback mechanisms and data use

Data Demand and Information Use
Part Two: Strategies and Tools

MEASURE Evaluation
www.cpc.unc.edu/measure

Information Use Mapping

In Dominica, local health centers and hospitals sent information about the number of people they tested for HIV/AIDS, while labs sent test results. A statistician in the Health Information Unit aggregated the data and sent a quarterly report to the Ministry of Health, which in turn sent a quarterly report to the Caribbean Epidemiology Center (CAREC) and an annual report to the Prime Minister.

Trouble was, local facilities never got these reports. They could not know how they compared to other facilities, or to national trends and goals. Were they on track or not?

These information gaps quickly became apparent when processes were visualized in an Information Use Map. Data were reported, but not used. Reports did not get back to the providers of source data. The mapping exercise identified ways the Health Information Unit could share its insights down the line, which would lead to mid-course improvements in pre-test counseling and greater acceptance of HIV/AIDS testing.

Scenario

Why is this tool important?

Too much information is sitting on shelves in reports instead of being used to improve conditions.

Existing monitoring and evaluation (M&E) systems typically focus on data collection and reporting to higher levels, while little attention is paid to how the data can be used locally for program improvements. As a result, there are many missed opportunities for feedback mechanisms and the identification of specific ways in which the data can be analyzed to make mid-course corrections.

The scenarios below are typical:

Local data are not being used locally. Oftentimes, data are tallied and reported up the levels, but are rarely analyzed and used to support mid-course corrections at the level at which they were generated. In many situations, data could be used to investigate trends over time, compare different areas, set priorities and goals for future years, compare progress against defined goals, and advocate for funding or policies.

Higher-level information does not return back to the local level. Consider the example of a family planning clinic, where data reveal a declining trend in use of oral contraception. The providers knew that women complained about the side effects, but they did not know how much the overall contraception rates were being affected. The district and regional officers knew contraception rates were declining, but could not know why. There was a need to bring these information sources and stakeholders together.

Local data are not assessed in broad context. For example, suppose 10 percent of the population in the region is expected to receive a service, and one district is only reaching 2 percent. Obviously, there is a large service coverage gap in this district—but the facilities and district office would not necessarily know it, because they may not be aware of how their service delivery rates compare to national objectives.

There is little incentive to produce high-quality data. People involved in local-level data collection efforts often do not see the purpose in collecting the data. They have a difficult time appreciating their role in the larger context of the health information chain, and as a result, spend less energy in collecting the data and in paying attention to detail.

Since there is such a large amount of money and effort being devoted to collecting data and reporting in health information systems, it only makes sense to maximize the impact of that data for real-world benefit. This is where the Information Use Mapping tool is so valuable.

Description

What does this tool do?

It identifies existing data reporting channels and opportunities to increase use of information to benefit programs and people, not just to file reports.

The Information Use Mapping tool is a flowchart framework and structured process for:

- ❑ Creating a schematic representation of the existing state of a health information system or sub-system.
- ❑ Through this visual representation, quickly identifying gaps and deficiencies in that information flow.
- ❑ Identifying opportunities for new feedback mechanisms to share high-level analysis and reports with lower levels of the information hierarchy.
- ❑ Identifying points in the process where additional analysis and use of data could lead to improved programs.
- ❑ Prioritizing recommendations for feedback mechanisms or other interventions, and formulating an action plan to implement them.

One of the tool's features that makes it so unique and effective is the visual nature of it. The flowchart captures a highly conceptual process in a way that is visible, clear and concrete.

Another key benefit is that the tool can be used to develop new approaches to addressing data collection, analysis and use constraints. It helps identify new, practical ways to use the data, such as points in the process where data could be applied to improve programs, or areas where capacity building could yield process improvements.

The Information Use Mapping exercise also identifies opportunities for new feedback mechanisms in the form of reports, email communications, cross-functional meetings, one-on-one supervisory visits, workshops or other channels. Feedback is important for assessing an entity's performance in broader context, and for gauging the quality of data processes. "Do the trends in our facility compare favorably to trends in comparable facilities, or to national trends?" "Do our data meet expected standards?"

The simple process of creating an Information Use Map helps participants better understand their role in the greater health information system—and the importance of collecting data in the first place. When people can see the value, they become more committed to consistent, sustainable, high-quality

data collection and to regular analysis of that data.

The Information Use Mapping tool can be developed and applied at the international, regional, national, or local level. The map can be an ongoing guideline to assess progress toward the “expected” future vision of the map. The Information Use Map can also become a standard part of an M&E system—revisited and revised at biannual or annual intervals, or whenever a new survey or special study is being designed.

Audience

Who should use this tool?

Key people involved in collecting, analyzing, reporting or using health information

The tool has three principal sets of users, with unique roles in using the tool:

(1) MEASURE Evaluation representatives (or other external consultants):

- Provide the Information Use Mapping tool.
- Identify key participants/stakeholders in the information flow.
- Help host-country partners use the tool to define the baseline Information Use Map, which describes the current information flow and existing mechanisms for using that information.
- Facilitate discussions that use the Information Use Map to identify opportunities for improving information flow.
- Help design and prioritize the planned improvements or interventions (such as feedback mechanisms or training programs).

(2) Data specialists, such as M&E coordinators:

- Contribute their knowledge of existing data resources and processes to create a baseline Information Use Map.
- Identify ways to resolve any gaps in that Information Use Map, perhaps to create another version of the map that represents the desired state.
- Implement the feedback mechanisms or other interventions defined as part of the Information Use Map process.
- Periodically revisit the Information Use Map to gauge progress toward the desired information flow.

(3) Program managers and other key stakeholders from various levels of the information system (such as national, sub-national, and facility):

- Validate the findings of the baseline Information Use Map, to ensure that the map accurately reflects real-world conditions.
- Participate in individual or group sessions to identify gaps and opportunities in this information flow.

- Prioritize the interventions for improving this information flow.
- Adopt the Information Use Map as an explicit component of their M&E system.

Timing

When would this tool be used?

There is never a bad time, but certain circumstances would trigger this activity.

The Information Use Mapping tool can prove useful at any time, but several conditions may trigger the initial creation of an Information Use Map or update of an existing map.

When developing an M&E framework for a national strategic plan. For example, a national coordinating agency might be developing a national strategic plan for its HIV/AIDS program. This could be a prime time to engage stakeholders in creating an Information Use Map to maximize the value and sharing of data within the M&E framework.

When planning a new component of an M&E system, such as a national survey program. The Information Use Map can ensure that the data-collection efforts return maximum value and that information is being fully exploited to improve local programs and results.

When there is insufficient information to guide mid-course corrections. Perhaps the M&E system is not producing the reports it should, or perhaps it was not designed to deliver all the information that is now needed. In either case, program managers need feedback about program performance or the impact of past program modifications so they can make informed decisions about the potential impacts of new decisions.

When information is available, but is underutilized. M&E specialists and other data managers want to see their data-collection efforts yield tangible value and real-world results. After generating a wealth of data resources, they do not want to see those resources unused. The Information Use Map can help ensure that information is not only gathered and reported to higher levels, but is also fully used at each level.

When stakeholders could benefit from feedback. How does the facility compare to other facilities? To regional trends? To national goals? An Information Use Map can help identify ways to provide this feedback so information that is aggregated and analyzed at a higher level is sent to lower levels.

During regular program reviews. Information Use Map “owners” should revisit the map during semi-annual or annual reviews—or at appropriate benchmarks in the M&E work plan. At this time, they could update the map to show new feedback mechanisms that have been implemented and identify new areas where data are now being used.

MEASURE Evaluation representatives (or other external consultants) might also identify a need based on their knowledge of external agency activities or in-country conditions.

Applications

Who has already used this tool?

Representative field applications

Swaziland – May 2005 to January 2006

National Emergency Response Council on HIV and AIDS (NERCHA)

Supporting a Strategic Information Assessment in Swaziland

MEASURE Evaluation helped NERCHA define data flow for national-level output indicators, identify data management challenges, and assess the M&E structures and processes that provide the necessary HIV/AIDS program data.

The Information Use Map helped participants see how data analysis was limited to compiling and summarizing data for reports to the Global Fund to Fight AIDS, Tuberculosis, and Malaria. Facility-level information was only reported to higher levels, not processed to deliver actionable insights at the local level. Nor did the facilities receive feedback about their performance in regional or national context.

As part of the Information Use Map exercise, participants identified ways to send higher-level reports back to the facilities to support local decision-making processes—as well as resolve local data quality and lead time issues.

Dominica, St. Lucia and St. Vincent – February–March 2005

National AIDS Program for each country

Developing Information Use Maps for HIV/AIDS data

MEASURE Evaluation helped in-country stakeholders develop an Information Use Map to assess information flow for decision-making among national AIDS programs.

The Information Use Map showed how little use was made of HIV/AIDS data. Most of the capacity and energies of the M&E system were spent on generating reports for the Ministry of Health, the national government, regional counterparts and international donor agencies. In general, facilities and communities did not use HIV/AIDS data to improve their own programs, nor was there sufficient capacity to do so.

In follow-up consultations, a MEASURE Evaluation facilitator helped stakeholders identify opportunities to use routinely collected HIV/AIDS data, as well as obtain feedback from regional and international levels. “How well are we meeting international goals?” “Do our reports meet expectations for data quality?” “How have high-performing entities achieved their successes?”

The group also created an Information Use Map that described what the information flow should look like—a powerful, visual message to use in advocating for funds from regional, national or private-sector organizations.

Kenya – February–March 2006

Population Studies and Research Institute, University of Nairobi

Using Information Use Maps in M&E training programs

MEASURE Evaluation has used the Information Use Mapping tool as a key component of training modules on data use for several national and international M&E training programs.

In Kenya, Information Use Mapping was incorporated into the training program for 16 staff from the National AIDS Control Council and the National AIDS and STDs Control Programme of the Ministry of Health.

In the training session, the mapping exercise focused on specific indicators from their HIV/AIDS program—encouraging participants to think strategically about how to best use that information at various levels. After the training program, insights from the Information Use Mapping exercise were applied in the real world, as participants implemented their national M&E system for HIV/AIDS.

About this document

What is in this tool guide?

Information Use Mapping description, sample, approach and process

This document contains descriptions of:

- The purpose, audience and typical applications for this tool.
- Guiding principles of the Information Use Mapping methodology.
- The structure of baseline and expected Information Use Maps.
- A systematic process for creating and using an Information Use Map.
- A checklist to use in implementing the process.

Guiding principles

The Information Use Mapping approach

Issues and considerations for using this tool

An achievable scope for the Information Map assessment needs to be selected.

Information Use Mapping can be applied for a full M&E framework for a national program, or for key indicators of that program, or within one agency or facility.

The more limited the scope, the more practical the application.

For example, mapping the entire M&E system for a national HIV/AIDS program could prove cumbersome and complex, but it would be realistic to map one indicator or component of that program, such as voluntary counseling and testing (VCT) or anti-retroviral therapy (ART). With a more specific focus, the Information Use Map would be more direct and specific.

The tool was designed for rapid assessment.

Information Use Mapping is intended to be a short-term exercise with long-term vision. The assessment and recommendation phases typically require a week or less. This is not intended to be an exhaustive assessment of every aspect of an M&E program, but rather a quick, highly visual representation of gaps and opportunities. The sooner the findings are revealed, the more relevant it will be to stakeholders—and the greater the momentum to move forward with interventions.

The mapping process can be formal or informal.

The process often begins with informal information-gathering with a few M&E specialists or key stakeholders. These informal sessions lead to a draft version of the map that is then shared with a small subgroup to verify the initial assessment and brainstorm initial recommendations for improvements. In other cases, the review process takes place in a formal workshop with a larger group of key stakeholders. The tool accommodates either way of working—formal or informal.

The process should include a broad range of stakeholders

Representation from the following three categories should take part.

- ❑ Technical specialists, such as an M&E coordinator
- ❑ People who are empowered at the national level to implement any planned improvements, such as a national malaria program manager
- ❑ Development partners, such as staff of donor agencies in the funding/reporting cycle

These people could be identified as part of a prior stakeholder analysis exercise. They should be involved in the process and have ownership in it. An Information Use Mapping activity for HIV/AIDS data in Dominica included the following stakeholder groups:

- ❑ Non-governmental organizations (NGOs)
- ❑ District and regional health administration organizations
- ❑ Laboratories, pharmacies and local health centers
- ❑ National AIDS program
- ❑ Ministry of Health
- ❑ Caribbean Regional Epidemiological Center (CAREC)

This is a collaborative and iterative process.

Collaborative. The Information Use Map should include the perspectives of key contributors in all aspects of the information flow. An external consultant (such as a MEASURE Evaluation representative) can be of great assistance as a facilitator in defining the baseline map, interventions or feedback mechanisms to improve that map, and the future map.

Iterative. The process usually starts with an initial small group meeting with a few data specialists and available stakeholders to draft the initial Information Use Map. Once drafted, the map is then validated in a formal stakeholder workshop, where improvements are recommended and prioritized.

The Information Use Mapping tool is flexible and adaptable.

Flexible. The mapping format and process presented in this document were developed from extensive experience with healthcare and population planning issues in Africa and the Caribbean. However, the tool reflects best practices that are applicable to a broader realm of issues and environments.

Adaptable. The process can be tailored to suit the circumstances. For instance, the background for the baseline Information Use Map could be gathered from a series of one-on-one interviews or a group workshop with all stakeholders together.

The Information Use Map format itself is adaptable, in that each map will include stakeholders/levels appropriate for the scope of the exercise. Other elements of the Information Use Map, such as the columns (data collection, collation, analysis, storage, reporting and use), or the order of stakeholders (low-to-high or high-to-low), can be adapted. However, note that custom adaptations may compromise the ability to compare Information Use Maps across times and settings.

Process steps are not absolute.

The Action Plan presented in this document outlines a logical sequence of steps, from project initiation to post-project review. However, not all steps will be relevant for all cases.

For instance, an informal assessment of information flow within one institution would not entail gathering stakeholders at national and international levels. Therefore, this Action Plan should be considered a guiding framework, representing best practices for typical Information Use Mapping activities, and not a strict prescription.

The Information Use Map

What does the tool include?

The Information Use Map is a schematic representation of information flow across various groups or stakeholders at different levels.

The following flowchart is designed to allow users to quickly, visually assess deficiencies and opportunities in the use of information. As such, the structure of the map is straightforward:

- Each row of the chart represents a stakeholder group, such as the local healthcare facility, ministry of health or international donor organization. Stakeholders are labeled down the left side of the map.
- Each column of the chart represents a stage in the information lifecycle, from data collection and collation, to analysis and reporting, to applying the data, to support optimal decisions.

Active data processes are mapped into this framework, with lines and arrows showing reporting hierarchies and other transfers of information between stakeholders or lifecycle stages.

On the following pages, there are three sample maps:

- A baseline Information Use Map that maps the flow of an existing information system.
- An annotated version of the baseline map identifying the points in the system where feedback loops and opportunities for data use need to be developed.
- A forward-looking Information Use Map that includes new elements, to show proposed enhancements.
-

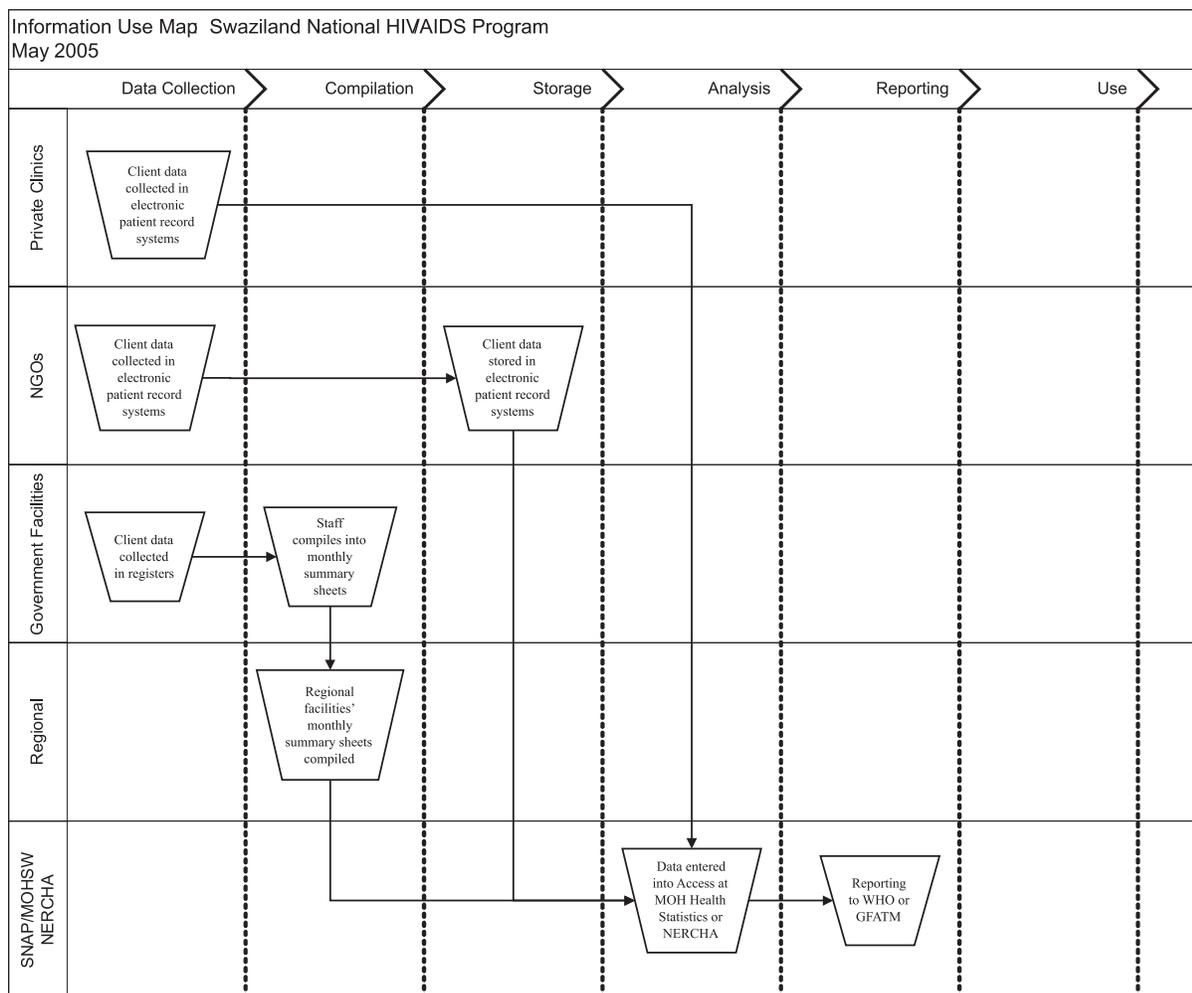
Sample baseline Information Use Map

Adapted from Strategic Information Assessment in Swaziland

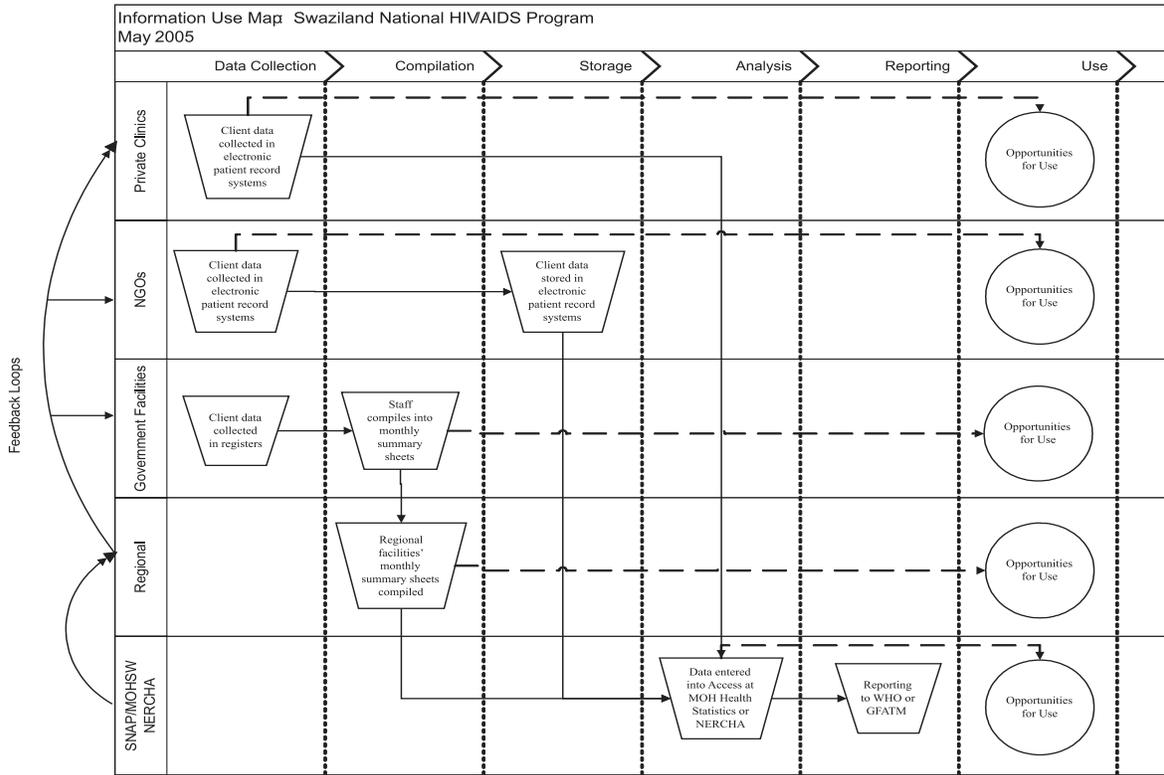
MEASURE Evaluation, January 2006

When an information flow is mapped visually, deficiencies quickly become apparent. Large, empty expanses of the chart tell the story. In sample (A), it is clear that insights from high-level reports are not shared back with lower levels, and information is only being used to file reports, not to support evidence-based decisions for program improvements. The second map (B) highlights potential improvements in the M&E system where feedback mechanisms can be developed and where opportunities for increased data use can be identified.

(A) Existing Data Flows



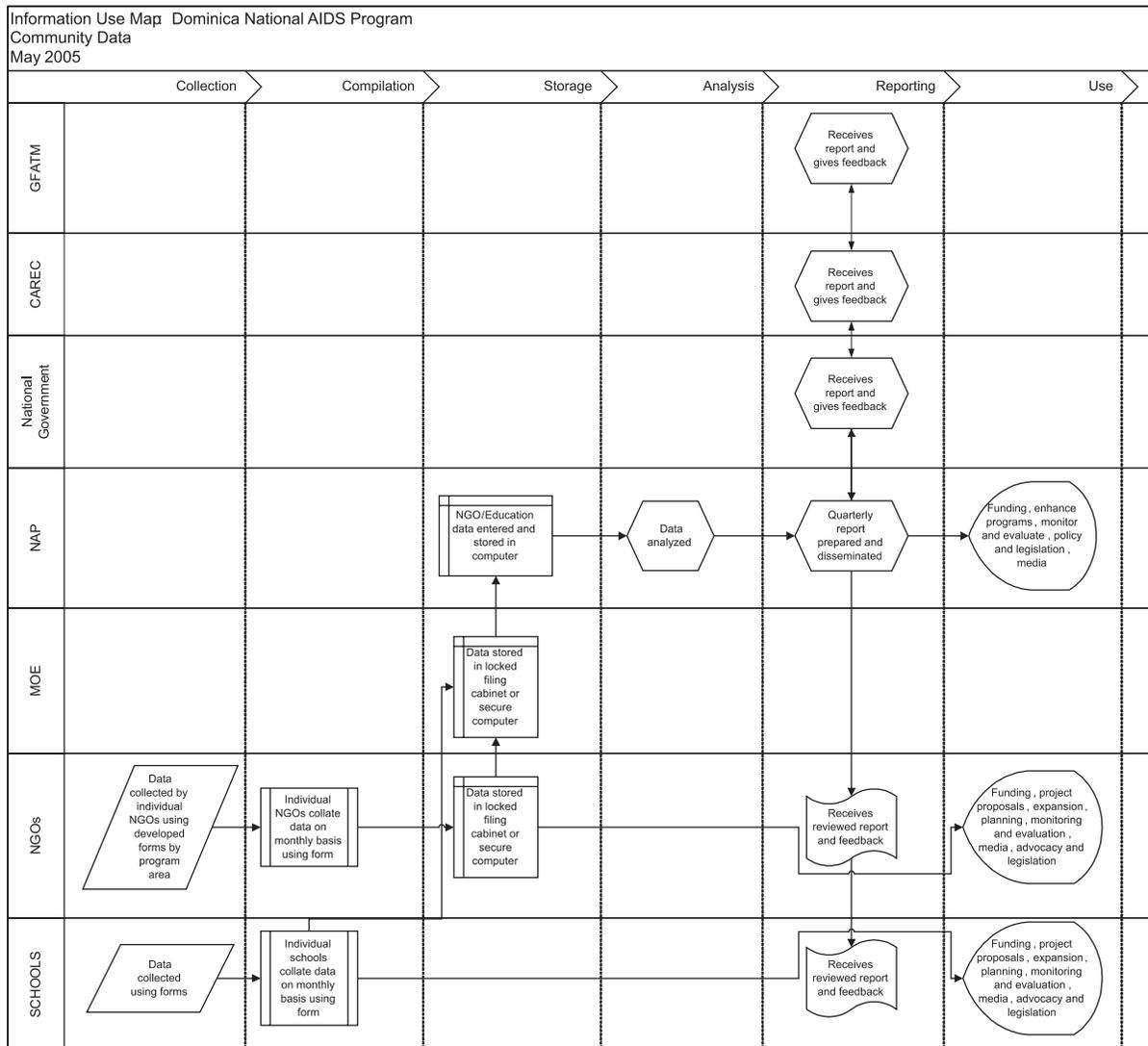
(B) Potential Improvements to the M&E System



Sample expected (future) Information Use Map

For an M&E system for HIV/AIDS community-based data
MEASURE Evaluation, March 2005.

This Information Use Map describes a future scenario that would improve data use. This map was developed with stakeholder consensus during a workshop in which desired improvements in the M&E system were prioritized. In this scenario, information transfer is now two-way, with feedback and quarterly reports being broadly shared across stakeholder groups. The map also identifies ways to use data to monitor and evaluate programs, improve programs, lobby for additional funding, influence legislation, or share information with the media and the public.



Creating the baseline Information Use Map

Collecting information to characterize existing information flow

Information-gathering through a questionnaire or interactive group forum

This section provides details on each stage of the information lifecycle (collection, collation, analysis, etc.), to help facilitators gather the information to create a baseline Information Use Map.

Collection

Determine what data elements are collected (or need to be collected), and include this as an action item in the row for the person or group responsible for that action. To obtain this information, a facilitator might ask:

- What data elements are collected?
- How are these data elements collected?
- What is the format?
- Is it electronic or manual?
- Who collects the information?
- How often is it collected?
- What issues, if any, influence data quality or security?

When the answers to these questions are assembled, a description such as this is written: “A nurse records the number of clients who received pre-test counseling for HIV in a logbook and on client charts, by hand, at the end of each day.”

Note that not every stakeholder will be involved in data collection. It is perfectly normal for the left-hand column to have entries at the lower and middle levels but not at higher levels.

Collation (or Compilation)

Discuss and capture how the collected data elements are compiled. To obtain this information, a facilitator might ask:

- What data elements or forms are collated?
- What is the format?
- It is electronic or manual?
- Who collates the information?
- How often is it collated?
- What issues, if any, influence data quality?

When the answers to these questions are assembled, a statement that describes the collation process is written. An example of the statement would be: “The district nurse-midwife manually adds up data from the VCT logbook and writes the total into a hard copy of a VCT abstraction form on a monthly basis. This compilation, however, is not always done on time.”

Note that not all data collection processes have matching data collation processes.

Storage

Discuss and capture how the collected and/or collated information is stored. (Note that it is possible that not all data will be stored). To obtain this information, a facilitator might ask:

- What collected or collated data are stored?
- How is this information stored?
- Is the storage electronic or manual?
- If electronic, what database format or software program is used?
- Who stores the information?
- How often is the information stored?
- What issues influence the quality or security of stored data?

When the answers to these questions are assembled, an active statement that describes the storage process, such as the following, is written: “The district nurse-midwife copies VCT monthly abstraction forms. The original is kept in a locked cabinet in her office, and the copy is mailed to the health information unit statistician. The data are entered biannually into Excel on a secure computer that is backed up nightly on the Ministry of Health server.”

Analysis

Discuss and capture the process of analyzing collected and collated data. To obtain this information, a facilitator might ask:

- What collected or collated data are analyzed?
- How is this information analyzed?
- Is the analysis electronic or manual?
- If electronic, what software program is used for analysis?
- What type of analysis is conducted?
- Who does the analysis?
- How often is the analysis done?
- What issues influence quality or security of analysis?

When the answers to these questions are assembled, a statement that describes the analytical processes is written: “A statistician in the health information unit analyzes data in the Excel VCT database once each quarter to determine frequencies and percentages of clients receiving the service.”

Note that some data elements will be collected but not collated; analysis is done on the original source data. It is also possible for one set of data to be analyzed in different ways by different system participants.

Reporting

Discuss and capture the reporting process, by asking:

- What raw data and/or analyzed information data are reported?
- How is this information reported?
- Is the report electronic or manual?
- If electronic, what software and communications are used?
- Who prepares and distributes the report?
- How often are the reports prepared and distributed?
- What issues influence the quality or security of reports?

When the answers to these questions are assembled, a statement that describes the reporting process is written: “The National AIDS Program Coordinator prepares a National AIDS Program Annual Report for the Ministry of Health, which documents the percentage of clients who accepted an HIV test after pre-test counseling.”

Be sure to differentiate between reporting and use. Often, when asked how they will use the data, respondents will say, “We’re going to use it to prepare a report.” For an Information Use Map, “using the data” means leveraging it to support a decision or activity, not just to prepare a report.

Use

The following questions are asked to discuss and capture the use of information to support a decision or activity:

- What data are used for practical decision making (such as advocating for funds, designing program improvements, or influencing policies)?
- How are data used; what decisions do they inform?
- What is the mechanism for facilitating the use of this data (such as quarterly department meetings and annual planning meetings)?
- How often does this process take place?
- What issues, if any, influence the quality and security of data use?

Data can be used immediately after any of the previous steps. For example, collated health facility data may be used immediately within facilities during a meeting of department heads to inform the improvement of client care or procurement of commodities. Ideally, there is some use of information for every stakeholder on the map.

The information in this section can be used to create a custom questionnaire to guide interviews with key informants. Stakeholders should review and approve the questionnaire at the initial meeting.

Process Action Plan

For using the Information Use Mapping tool

Seven steps

Step 1. Perform pre-assessment planning.

- 1.1 Identify a potential need or opportunity.** At times, national governments feel that their M&E systems are not delivering all the reports and value that they should. Unsure about how to resolve deficiencies with limited budgets and personnel, they may ask for help from external donors or government agencies. This request for assistance can trigger a direct request to MEASURE Evaluation (or other technical assistance organization) to perform an assessment and make recommendations. Information Use Mapping is very well suited for this task.

Sometimes the opportunity is brought to light by MEASURE Evaluation colleagues and host-country counterparts. These people can help determine an appropriate time to engage in this activity and help make introductions with in-country stakeholders.

- 1.2 Write up an internal summary of the planned activity.** This document could be as simple as an email or one- or two-page proposal, which could describe:
- The need identified in Step 1.1.
 - How technical support to address that need will be provided.
 - The preliminary list of stakeholders and how they will be engaged.
 - An outline of process steps.
- 1.3 Obtain endorsement and approval from the activity lead to proceed,** or whatever organizational authorization process is required.

Step 2. Define details of the activity.

- 2.1 Determine the scope of the Information Use Map.** What is the program area to be addressed? What is the scope of the map(s)? Will the map examine national data flow or information flow for one facility? Will it examine all community-based data, or data flow for certain surveys, special studies or indicators? In general, the more focused the scope, the more practical and targeted the recommendations that will result.
- 2.2 Identify the key participants.** A small, core group of interested individuals who will help drive this process needs to be identified. Their goals and objectives need to be determined, and the role of the Information Use Mapping tool needs to be clarified.
- 2.3 Adapt the Information Use Map, if necessary.** The standard Information Use Map sets forth six stages or steps in the information lifecycle: data collection, collation, storage, analysis, reporting, and use. If the activity has some unique step to consider, the map can be adapted accordingly. It should be kept in mind that adapting the structure will reduce the usefulness of the map for comparisons across time or across scenarios. The amount of detail required for describing each of the stages or steps should be kept to a minimum. Since the basic

purpose is to identify gaps in the information flow and opportunities for improved data use, more focus should be placed on the element of data use.

Step 3. Engage stakeholders.

- 3.1 Identify a limited number of stakeholders.** Only a few stakeholders are needed to help create a preliminary Information Use Map. The objective is not to be as inclusive as possible, but rather to move forward efficiently to capture the existing information flows. Some recommendations need to be made and priorities need to be set. These priorities can be reviewed later with a broader group of stakeholders.

This core group of stakeholders should include one or two representatives from each of these categories:

- Technical specialists, such as an M&E coordinator.
- People who are empowered at the national level to implement any planned improvements, such as a national malaria program manager.
- Development partners, such as staff of donor agencies in the funding/reporting cycle.

To help identify the best people to include, conversations with in-country personnel or information from a formal stakeholder analysis are useful.

- 3.2 Obtain buy-in on the purpose and scope of the activity.** Plan for the approach to be used, the scope of the map, the facilities, and people to be interviewed. The product of the activity, and what various stakeholders will get out of the activity also need to be discussed and clarified. These issues should be clarified in initial conversations or a group meeting. It is important to obtain consensus on what the activity will achieve. Stakeholders need to understand that the tool is designed to identify opportunities for improvement; it is not itself an intervention.

Diplomacy is important here. Even though an external consultant might view Information Use Mapping as a basic assessment, host-country stakeholders can perceive it as a critique of their performance or capabilities. By setting an objective tone at the outset—"This is an exercise to obtain more use from available data"—political and personal sensitivities can be minimized.

Step 4. Gather information for the baseline Information Use Map.

- 4.1 Conduct desk review of official information processes.** The process needs to begin with a comprehensive review of plans, national policies, and guidelines, particularly an M&E framework or implementation plan, if available.
- 4.2 Conduct interviews with data reporting people.** Whereas the desk review will yield the official perspective on how data-flow processes should work, a real-world view will be obtained from M&E specialists at the institutions involved in reporting processes. Interviews with these people will confirm the degree to which the national M&E plan has been implemented, and if deficiencies exist, why they exist.

- 4.3 **Conduct interviews with key informants.** In Step 3 (and probably also through the desk review and interviews with M&E people) appropriate people to interview were identified. This will be a small number of key informants—no more than 10 or 12—representing a few typical facilities at each level, such as a national referral hospital, district hospital and a selection of local health centers or community-level programs. Details about how to gather the information can be seen in the “Creating the Baseline Information Use Map,” mentioned earlier in this document.

The interview for Information Use Mapping does not replace a Service Provision Assessment (SPA) or other health service survey interview. An Information Use Map does not collect information about health services that are being provided. In this step, a limited interview is conducted to help determine existing systems for analyzing or using data.

- 4.4 **Create a report of findings,** including the baseline Information Use Map and explanatory text as necessary.

Step 5. Conduct a validation workshop with key stakeholders.

A day-long workshop with as many of the original stakeholders should be convened as possible. At this workshop, participants will:

- Review the findings of the baseline Information Use Map and validate the researcher’s interpretation (or clarify any perceived discrepancies).
- Identify opportunities for improving data use and feedback mechanisms in that flow.
- Map the appearance of their expected Information Use Map.
- Prioritize the activities or interventions that were recommended.
- Design actionable next steps for program managers to implement those recommendations.

What does the Information Use Map look like? Where are there new opportunities to use information? What resources are needed to make that happen? What barriers exist, and how can they be addressed? What should be done next, and how? The answers to these questions do not necessarily have to be detailed or comprehensive, but there should be enough information to form a guideline and encourage forward momentum.

Step 6. Document and share the results of the validation workshop.

- 6.1 **Create a final report.** The final report should include the following elements:
- The baseline Information Use Map, updated to reflect any revisions suggested during the stakeholder workshop.
 - Narrative description of gaps that were identified, such as areas where useful data were readily available but not used.
 - The projected Information Use Map, showing the anticipated information flow.
 - Narrative description of proposed activities to implement that projected view: interventions (such as capacity building on data analysis and use at different levels in the

system) and feedback mechanisms (such as dissemination of reports down the levels). Where possible, tangible recommendations should be included in the report.

- Priorities, required resources, and next steps.

For example, the following questions should be addressed in the final report:

- What exactly is a “resource” in this context? Is it money, another data analyst, a software program, an approval or a new skill?
- What exactly is the feedback loop? Is it an email distribution of a report, or a quarterly meeting with managers during regular site visits? Is it a matter of sending printed copies of a report to a broader audience than before?
- What is meant by “more analysis?” Is it a trend analysis of indicators at the district level, comparing targets with achievements at each level of the system? Is it estimating coverage levels for various services at the district and sub-district level? What indicators should be included?

When recommendations are specific, the next steps can also be specific, and are more likely to take place.

- 6.2 Share this report with stakeholders**, especially national program managers and donor agencies. This report can serve as a baseline and roadmap for host-country representatives as they carry out the recommendations and conduct future assessments of their M&E system.

Step 7. Monitor and document the results of using the Information Use Map.

An objective of MEASURE Evaluation (and the driving purpose of the Information Use Mapping tool) is to promote better use of data to drive decision making. This objective is shared by many organizations. Furthermore, donor organizations (such as USAID, CDC and World Bank) want to know that data-collection efforts yield maximum value in real, human terms, not just in more reports.

All of these objectives are served by revisiting the Information Use Map and documenting the successes that can be directly or indirectly attributed to its use. It is advisable to maintain a relationship with the in-country “owner” or champion of the Information Use Map—even if it is only through email correspondence—and periodically review the following types of information:

- Which recommendations have been implemented?
- In what new ways are data being used to drive program success?
- In what ways have better data processes supported training activities?
- What has been the impact of new feedback mechanisms?
- Does the organization use the Information Use Map as an ongoing guide?
- What overall benefits have been seen?

Documenting this information helps enable MEASURE Evaluation to refine the tool based on an ever-expanding range of field experiences.

Checklist

For an Information Use Mapping activity

Summary of the Process Action Plan

This checklist can be photocopied and used as a reference for the process steps. Note that Information Use Maps with a limited scope—such as within an institution—will not require all the steps. This checklist should be used as a general guideline, to ensure that a systematic approach and best practices are followed.

- Step 1. Perform pre-assessment planning.**
 - 1.1 Identify a potential need or opportunity.
 - 1.2 Develop an internal summary of the planned activity.
 - 1.3 Obtain endorsement for the project plan.
- Step 2. Define details of the activity.**
 - 2.1 Determine the scope of the Information Use Map.
 - 2.2 Identify the key participants.
 - 2.3 Adapt the Information Use Map, if necessary.
- Step 3. Engage stakeholders.**
 - 3.1 Identify a limited number of stakeholders to include.
 - 3.2 Obtain their buy-in on the purpose and scope of the activity.
- Step 4. Gather information for the baseline Information Use Map.**
 - 4.1 Conduct a desk review of official information processes.
 - 4.2 Conduct interviews with data reporting people.
 - 4.3 Conduct interviews with key informants at all levels.
 - 4.4 Create a report with the baseline map and explanatory text.
- Step 5. Conduct a validation workshop with key stakeholders.**
 - Review and validate the baseline Information Use Map.
 - Identify new opportunities for feedback mechanisms and data uses.
 - Map out the appearance of the expected Information Use Map.
 - Prioritize the activities or interventions that were recommended.
 - Design actionable next steps for program managers to implement.
- Step 6. Document and share the results of the validation workshop.**
 - 6.1 Create a final report with both the baseline and expected maps.
 - 6.2 Share this report with key stakeholders.
- Step 7. Monitor and document results of using the Information Use Map.**

Conclusion

Improving data flow and utilization at all levels

Ensuring that data drives real advances in health and welfare, not just reports

Data collection systems are often designed and developed with a singular goal: report to national governments or international donor agencies. Huge volumes of data are created, but little of it is actually used to directly benefit programs and people.

“Does our program serve all the people it is intended to serve? If not, what should we be doing differently?”

“Are we making progress toward reaching the people who need HIV/AIDS voluntary counseling and testing?”

“What percentage of children who experienced diarrhea has access to oral rehydration solutions? Have we adequately trained mothers to provide this care?”

“Are we doing a better job providing ante-natal care to pregnant women at local clinics? What could we do to reach even more women?”

“What percentage of children and pregnant mothers are actually using the insecticide-treated bed nets we distributed? How can we improve this?”

The extent to which program managers can answer these questions depends on where analysis takes place, who has access to the findings and — where information is compiled at a high level — what specific channels have been created for feeding that information back to relevant service providers.

The Information Use Mapping tool is invaluable for:

- Identifying missed opportunities for facilities or community organizations to analyze their own data—to identify problems with the services they are providing and suggest mid-course improvements.
- Identifying ways to provide program managers with the information about their performance in a broader context.
- Ensuring that new M&E initiatives are designed to deliver real-world benefits.

By enabling people to see the long-term value of the data they are collecting, Information Use Mapping increases their commitment to quality and consistency in data collection and analysis.

Acknowledgments

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Stakeholder Engagement

An assessment and implementation tool for identifying stakeholders in a data collection initiative and engaging them as contributors and beneficiaries

Data Demand and Information Use
Part Two: Strategies and Tools

MEASURE Evaluation
www.cpc.unc.edu/measure

Stakeholder Engagement

Tanzania, 1979. A researcher with an international agency was developing a plan for an integrated rural development project. The question at hand was, “Should the project focus foremost on clean water supplies, building roads, or improving health care?” A series of village-level focus group discussions was held to determine the right priorities.

Local men were divided about the relative importance of those essential infrastructure improvements. Government agencies, if asked, would naturally advocate for the activities that aligned with their missions. But to everyone’s surprise, local women said that their top priority was preventing sexual violence. The women were routinely subjected to intimidation and assault and had taken to doing their daily chores in protective groups. That issue had not even been on the radar.

If the researcher had not included village women, the issue might not have come to light at all. The project, if designed without their unique perspective, would have taken a very different course. It might ultimately have been deemed a success while doing little to improve a critical element in the daily lives of half the local population.

Scenario

Why is this tool important?

To be useful—and used—data initiatives must reflect the needs and values of relevant stakeholders.

Since there is such a large amount of money and effort being devoted to collecting data and reporting in health information systems, it makes sense to maximize the impact of that data for real-world benefit. This is where the Stakeholder Engagement tool is so valuable.

Data-based research is only valuable if it is seen as relevant and will be more useful if it is felt to be ‘owned’ by prospective users.

These realities call for engaging an appropriate set of stakeholders when proposing, designing, implementing, and reporting on monitoring and evaluation (M&E) initiatives.

- Who needs to use the data, and what questions are they seeking to answer?
- Who has influence and resources that can be brought to bear to aid this project?
- Who will be directly or indirectly affected by the outcome of this initiative?
- Who will support our plan? Who will oppose it? Why? How do we deal with it?
- What roles can all these people contribute to the process?
- How can we best leverage their insights or assuage their objections?

Effective stakeholder analysis answers these questions in a way that significantly improves a project design and the real-world value of the results.

Yet, typically, stakeholder analysis is done informally, in an ad hoc way. The rationale behind choosing and engaging stakeholders is rarely consistent, systematic, or documented. A researcher

may talk to people to identify stakeholders and their roles, but the process is intuitive rather than systematic, and it rarely happens the same way twice. As a result, the following scenarios are typical:

- ❑ Stakeholders are invited to participate, but only those who agree with the proposed plan.
- ❑ Stakeholders are selected only from the organization that is directly involved in the project.
- ❑ Stakeholders are invited to a preliminary briefing, but they are not thereafter included in project design.
- ❑ The process includes only the bare minimum number of stakeholders required to obtain formal approvals.
- ❑ Stakeholders included in the project may not be at the appropriate level in a community or organization to contribute to the project or make decisions.
- ❑ Stakeholders are spurred to excitement about the project at the onset, and then receive little or no follow-up about the results of the activity.

If these conditions exist, the M&E project will, in all likelihood, suffer as a result. For instance:

- ❑ Project developers may overlook important interest groups that could contribute valuable insights about the activity, as illustrated in our opening example.
- ❑ The project will not benefit from the resources of those interest groups, such as government agencies with policy influence or media representatives who can build public awareness.
- ❑ The resulting data may be underutilized, because the people who could use it may not feel that it was developed with their interests and involvement.

For example, the national government of an African country did not support the findings of a new demographic and health survey because they had not been very involved in the process. In addition, the results conflicted with other indicators and data sources they had that cited similar information. In short, since they were not involved in the process, they did not see the value of the new data.

In another example, the people involved in local-level data collection did not see much purpose in what they had been tasked to do and, as a result, the data that were collected were of poor quality. They had not been engaged early on as stakeholders and so they had a difficult time appreciating their role in the larger context of the health information chain. As a result, they had little incentive to provide the energy and attention to detail that would have produced higher quality data.

In another example, an international donor agency undertook an ambitious stakeholder engagement strategy in preparing a national poverty reduction plan. They involved thousands of people in community focus groups. This activity sparked interest and excitement about the potential of the project. Unfortunately, there was no follow-up to inform the focus group participants about what the project had achieved. This lack of follow-up created disillusionment, and may discourage people from participating in such exercises in the future.

These are just a few examples of many that point to the same conclusion: there is a strong relationship between ownership, data quality, data relevance, and data use. People are more likely to use data in their decision making if they have been involved from the beginning, they believe the data are of high quality, and they feel the specific data address their priorities.

Engaging stakeholders early and systematically in the research process enables the right questions to be asked in the right way, and, in turn, to define data activities that will generate quality information that can be used.

Description

What does this tool do?

It provides a structured way to identify and engage stakeholders to improve data initiatives.

The Stakeholder Engagement tool is a matrix framework and process for:

- ❑ **Identifying stakeholders.** The tool helps identify individuals and groups that are stakeholders in an M&E activity, either as contributors, influencers or beneficiaries.
- ❑ **Defining their roles and resources.** The tool provides a structured way to define the roles that stakeholders play in the activity, and assess the resources they could bring to bear.
- ❑ **Identifying dynamics among stakeholders.** The tool also provides a framework for assessing the interests, knowledge, positions, alliances, resources, power, and importance of various stakeholders. Who will resist the initiative? Who will support it? What are their reasons?
- ❑ **Setting the optimum stakeholder group.** The tool helps assess which stakeholders to include in the process by determining the relative priority of stakeholders. Which stakeholders have the highest priority?
- ❑ **Creating an engagement plan.** The tool helps the user develop an engagement plan by providing examples of stakeholders engaged in pre-project briefings, project design, project execution, and follow-up activities.
- ❑ **Tracking stakeholder engagement.** Finally, the tool helps ensure that stakeholders are engaged as appropriate throughout all of the project phases, including the post-project follow-up that is so often overlooked.

The Stakeholder Engagement tool presented in this document was developed from extensive experience with healthcare and population planning issues in Africa, Asia, and the Caribbean. However, the tool reflects practices and approaches that are applicable to a broader realm of issues and environments.

The tool is not a prescription; the varying needs of M&E projects require flexibility with an overlay of process consistency. The Stakeholder Engagement tool is intended to be used as a guide, and therefore provides guiding principles, suggested practices, and a matrix for recording information.

Audience

Who should use this tool?

Key people involved in designing activities to collect, analyze, report or use health information

The tool has three principal sets of users, with unique roles in using the tool:

(1) MEASURE Evaluation representatives (or other technical assistance personnel):

- Provide the Stakeholder Engagement tool for use by project design teams.
- Identify key project management team members.
- Work with the project management team and other host country counterparts to complete the Stakeholder Engagement matrix.
- Participate in stakeholder engagement activities—such as group meetings, focus group discussions, or media briefings—according to the engagement strategy.

(2) In-country management team members, including the host country institute or organization that is sponsoring/coordinating the activity:

- Contribute their knowledge of stakeholders who have a vested interest in the program, activity or issue.
- Identify individuals who are not only stakeholders, but potential champions for this particular activity.
- Contribute their knowledge of the strategies that could be successful in this context, based on their experience.
- Collaboratively complete the Stakeholder Engagement matrix.
- Implement the engagement strategies and follow-up measures as defined in the Stakeholder Engagement matrix.
- Revisit the matrix at various project stages to ensure that stakeholder involvement is continued as appropriate throughout the project life cycle.

(3) Program managers and directors or other high-level program officials:

- Validate the findings of the stakeholder analysis.
- Endorse or oversee the stakeholder engagement activities.
- Participate directly in engagement activities with stakeholders at an equivalent level, such as senior government and political officials and other organizational leaders.
- Serve as spokespersons in high-profile media engagements.

Timing

When would this tool be used?

In planning, executing and sustaining any project related to data demand and information use

Data demand and information use (DDIU) processes have several different points of entry. For example, a project that requires stakeholder engagement could be triggered by any of these conditions:

- Stakeholders report that they need information that does not yet exist.
- Information exists, but it is not being used as it should.
- A decision needs to be made based on data not yet located or generated.
- A decision calendar, information use map, or other tool is being used.
- An M&E system must be developed or upgraded.

The project in question could be a primary research project being undertaken by MEASURE Evaluation or any other technical assistance project, such as a survey, data collection effort or program evaluation. It could also entail operations research, such as further analysis of a health service provision assessment. Finally, the activity could involve development and implementation of an M&E system component itself.

The Stakeholder Engagement tool adds value in any of these scenarios and project types, and should be used at the earliest stage of project design, prioritization and preparation. It is important to identify and acknowledge areas of resistance and areas of potential support early in the process. Stakeholder engagement should also continue in the implementation phase, in sustaining the activity, and in advocacy efforts that flow from the activity.

Applications

How has this tool been used?

Representative field application

Kenya – August 2004 through August 2005, ongoing stakeholder involvement in the Analysis of Recent Trends in Fertility and Contraceptive Use, Nairobi, Kenya

Further analysis of the Kenya Demographic and Health Survey

The 2003 Kenya Demographic and Health Survey documented a stall in progress on key fertility measures and contraceptive use. Why was this trend occurring, and what should be done about it?

MEASURE Evaluation worked with local counterparts to apply the Stakeholder Engagement tool to ensure broad involvement and ownership in the analysis. The team knew that if corrective actions were to be effective, a broad range of key decision makers needed to be involved from the very beginning—not just in approving a study, but also in selecting the issues to be studied.

The process began with a one-day stakeholders meeting of more than 90 policymakers and program managers from the public sector, non-governmental organizations (NGOs) and donor organizations, hosted by the National Coordinating Agency for Population and Development (NCAPD).

There was high-level, active participation from the Ministry of Planning and National Development, the Central Bureau of Statistics, Ministry of Health headquarters and provincial and district representatives. Representatives from sub-national agencies and the private sector, who are not often involved in the design of national evaluation efforts, were also included. This meeting assembled new and non-traditional stakeholders in the exercise. The workshop was covered by television and print media, which raised public awareness of the issue.

Following the stakeholders meeting, teams of Kenyan researchers were assigned to the six major areas of investigation identified during the meeting. Initial findings were presented at an April 2005 meeting on “repositioning family planning” organized by the NCAPD for members of parliament. At that meeting, a Parliamentary Caucus on Reproductive Health was formed and assumed leadership in the national effort.

A second stakeholders meeting was held in August 2005 to review the full results of the analysis and prepare a Data Use Calendar (another MEASURE Evaluation DDIU tool). The Data Use Calendar is being used to ensure that the analysis results are actively used to guide decisions on corrective actions to revitalize family planning and reproductive health services in Kenya.

About this document

What is in this tool guide?

Stakeholder Engagement tool description, sample, approach and process

This document contains descriptions of:

- The purpose, audience and typical applications for the Stakeholder Engagement tool.
- Guiding principles of the Stakeholder Engagement methodology.
- Matrix templates for stakeholder analysis and engagement strategies.

Guiding principles

The Stakeholder Engagement approach

Issues and considerations for using this tool

Ownership fosters use.

The ultimate goal of M&E efforts is to create useful information that is actually used. Promoting use rests on two key questions:

- Will analysts trust and use the data generated by surveys, studies, and M&E data collection systems?
- Will officials trust and rely on the analysis to design interventions, make management decisions, and formulate policy?

The answers to these questions are strongly connected to ownership. Experience has shown that data use is frequently linked to the extent of the ownership and commitment people have in these systems and the research findings they produce.

Stakeholder Engagement improves data.

Once again, given that the ultimate goal of M&E efforts is to create useful information, data specialists have to ask:

- Is the study designed to gather relevant information on relevant issues—at an appropriate level?
- Is it socially and culturally appropriate?
- Does it reflect the realities of the people it is ultimately intended to benefit?

The answers to those questions depend largely on the degree to which stakeholders with a vested interest in the outcome have been included in project design.

It is tempting to include only those people who share the vision of the data specialists and are likely to support the initiative and or only the most limited number of people required to secure project approval. But the relevance of the data initiative and the usefulness of the results may be greatly enhanced if the process engages stakeholders of many types.

Stakeholders should represent a diversity of perspectives.

The process should include a broad range of stakeholders, including, at a minimum, representation from the following three categories:

- Technical specialists, such as an M&E coordinator.
- People who are empowered at the appropriate governmental level to implement any planned improvements, such as a national-level or district-level malaria program manager.
- Development partners, such as staff of donor agencies in the funding/reporting cycle.

For example, an Information Use Mapping activity for HIV/AIDS data in Dominica included the following stakeholder groups:

- NGOs and private voluntary organizations
- District and regional health administration organizations
- Laboratories, pharmacies, and local health centers
- National AIDS program
- Ministry of Health, national government
- Caribbean Regional Epidemiological Center (CREC)

Stakeholders should be included from various levels—national, regional and local—as appropriate to the activity. Stakeholders who have the interest, expertise, resources, or influence to be champions for change should be looked at with particular interest. Whether program changes or policy changes are being considered, engaging such champions can help influence a positive outcome.

Recognize the differing roles of stakeholder groups and individuals.

Their contributions will vary. For example, different stakeholders may offer:

- Advocacy at high levels of government.
- Greater public awareness through the media.

- Technical inputs to the design of the activity.
- Resources that can be mobilized for implementing the activity.

For some stakeholders, the role will be that they are personally, directly affected by the issue under study. For example, in planning HIV/AIDS-related projects, several people living with HIV/AIDS should be included. Their perspectives can enhance the accuracy, appropriateness, and effectiveness of the activities and interventions.

The Stakeholder Engagement tool is designed to capture all these potential roles in a systematic way.

Engage stakeholders throughout the project process—from design to follow-up.

Oftentimes, stakeholder engagement has been limited to a pre-project briefing and post-project debriefing, with the primary objective to convince stakeholders to endorse an initiative that was already formulated. Stakeholders may have also been solicited for their feedback later, but not for their active involvement in project development.

By contrast, the Stakeholder Engagement tool supports a three-stage process: identify, engage and follow up. The tool prompts users to consider stakeholder engagement not just in the design phase of the activity, but throughout all phases of the project by developing an action plan for engaging stakeholders.

Engaging stakeholders throughout the process, not just at the beginning and end, can raise awareness of the activity and facilitate the use of data and information produced by the activity.

Acknowledge the unintended effects of stakeholder engagement.

The more stakeholders, the more cumbersome the engagement process.

It takes time, energy and resources to expand the number of stakeholders included in an activity. It is one thing to gather a focus group discussion of 10 representatives; it is quite another to organize a formal stakeholder meeting of 150 high-level officials with media. The relative value of each person's involvement versus the added time and costs of expanding the number of stakeholders needs to be considered carefully at the outset.

The more stakeholders, the greater the complexity of project design.

As more stakeholders are included—with their unique perspectives and priorities—the likelihood of finding inconsistent or competing interests may increase. Their diverse demands may require negotiation and compromise in the activity, which may or may not improve the outcome.

For example, national and ministry program managers tend to want summarized demographic and health survey data, while district officials want data disaggregated at the district-level. Similarly, local leaders might want to use the survey data to do municipal planning, whereas national leaders might want to focus on increased social services—which very well could be competing interests. Resolving these differences requires negotiation and compromise, and increases the difficulty in building consensus.

A large stakeholder group might stimulate excessive expectations.

As a larger number of stakeholders are engaged, there is the risk of creating more demand than

the activity can fulfill and politicizing the issue in an unintended way. For example, when media representatives are included—and thereby the public is involved—there is a danger of raising unrealistic expectations about what the activity will achieve. If stakeholders do not see the rapid change they imagine should happen, they can become disillusioned and less willing to participate in future activities.

Transparency can add unwanted accountability.

Engaging a large group of stakeholders could raise the profile of an activity in a way that stakeholders may find unproductive. For example, opening up a researcher's work to public scrutiny could invite unwanted critique of a research design that has already been reviewed and found to be fundamentally sound.

Addressing the unintended effects of Stakeholder Engagement

- ❑ The objectives of the activity should be clearly defined at the beginning so the most essential stakeholders to engage can be identified. The maximum number of possible stakeholders should then be identified. The optimum number to ultimately engage will be somewhere between these two extremes, commensurate with the time and resources that are available.
- ❑ The level of stakeholder involvement should be appropriate to the size/scale of the intervention being proposed. More is not necessarily better.
- ❑ Anticipated outcomes need to be clarified in stakeholder meetings to help minimize unrealistic expectations. Timeframes, levels of resources available, and cost-sharing implications to be met by different stakeholder groups should also be clarified during these meetings.
- ❑ Stakeholder involvement should be limited to those who can directly influence the quality of the research or data, or have a use for the data. Those who will not get some direct benefit from the activity should not be involved.
- ❑ The political or culturally sensitive nature of some topics, and how stakeholders may react, need to be taken into consideration. For example, HIV/AIDS programs raise political and religious sensitivities regarding condom distribution programs, homosexuality, intravenous drug use—topics that church representatives and public officials may be reluctant to address.

The Stakeholder Engagement tool is flexible and adaptable.

The Stakeholder Engagement tool can be tailored for any type of setting that entails information gathering and use at the international, national, and sub-national levels. This document outlines the typical sequence of steps that would be followed in implementing the tool. Not all steps, however, will be relevant for all cases. For example, only the up-front stakeholder analysis, as part of a data assessment, could be performed; or a stakeholder engagement plan to develop activities for a proposal could be created.

The Stakeholder Engagement Matrix provided in this tool can be incorporated into any type of M&E activity.

The Stakeholder Engagement tool

What does the tool include?

Stakeholder Analysis Matrix and Stakeholder Engagement Plan

This section presents a blank version of the two-part Stakeholder Engagement tool. The next section describes the type of content to be included in each category and field. There are two parts to the tool:

- Part 1: Stakeholder Analysis Matrix—For project planning phases.
- Part 2: Stakeholder Engagement Plan—For project implementation and follow-up phases.

Practical considerations for using the tool

The Stakeholder Engagement tool represents a guide to asking the right questions, but there is no one way or specific protocol for gathering the necessary information. Useful information to add to the matrix and plan can surface in any encounter, not just in meetings specifically designed for this tool.

The process tends to be iterative.

The process begins by asking a key informant to identify the key stakeholders. During discussions with those individuals, they will likely identify other stakeholders. Ultimately the matrix will capture the contributions, roles and engagement strategies of stakeholders and groups at different levels and with different vested interests.

The tool can be used in hardcopy or electronic form. It is generally better to print a copy of the matrix and write notes in it by hand, because typing on a computer can create a barrier to comfortable communication when working with key informants or stakeholders.

Supplementary stakeholder profiles may be helpful.

The matrix is designed to allow the user to quickly and visually see that information is complete for each stakeholder group. Including additional supporting detail in a separate document can also be helpful in building a complete profile for each stakeholder group.

Stakeholder Analysis Matrix¹

Program issue _____

Proposed activity _____

Date _____

| Name of stakeholder organization, group or individual National, regional or local? | Stakeholder description Primary purpose, affiliation, funding | Potential role in the issue or activity Vested interest in the activity | Level of knowledge of the issue Specific areas of expertise | Level of commitment Support or oppose the activity, to what extent, and why? | Available resources Staff, volunteers, money, technology, information, influence | Constraints Limitations: need funds to participate, lack of personnel, political or other barriers |
|---|--|--|--|---|---|---|
| Government sector | | | | | | |
| | | | | | | |
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| Political sector | | | | | | |
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| Commercial sector | | | | | | |
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Stakeholder Analysis matrix, continued

| Name of stakeholder organization, group or individual National, regional or local? | Stakeholder description Primary purpose, affiliation, funding | Potential role in the issue or activity Vested interest in the activity | Level of knowledge of the issue Specific areas of expertise | Level of commitment Support or oppose the activity, to what extent, and why? | Available resources Staff, volunteers, money, technology, information, influence | Constraints Limitations: need funds to participate, lack of personnel, political or other barriers |
|--|---|---|---|--|--|--|
| Non-governmental sector | | | | | | |
| | | | | | | |
| | | | | | | |
| Other civil society target audiences | | | | | | |
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| International donors | | | | | | |
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¹Adapted from Brinkerhoff, D. and B. Crosby, Managing Policy Reform: Concepts and Tools for Decision-makers in Developing and Transitioning Countries, Kumarian Press, CT, 2002 and POLICY, Networking for Policy Change: An Advocacy Training Manual, 1999.

Stakeholder Engagement Plan²

Program issue _____
 Proposed activity _____
 Date _____

| Stakeholder organization, group or individual | Potential role in the activity | Engagement strategy How will you engage this stakeholder in the activity? | Follow-up strategy Plans for feedback or continued involvement |
|---|--------------------------------|--|---|
| Government sector | | | |
| | | | |
| | | | |
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| Political sector | | | |
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| Commercial sector | | | |
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| Non-governmental sector | | | |
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| Other civil society target audiences | | | |
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| International donors | | | |
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² Adapted from Brinkerhoff, D. and B. Crosby, Managing Policy Reform: Concepts and Tools for Decision-makers in Developing and Transitioning Countries, Kumarian Press, CT, 2002 and POLICY, Networking for Policy Change: An Advocacy Training Manual, 1999.

Completing the Stakeholder Engagement templates

Identifying stakeholders, engagement strategies and follow-up activities

Overview strategy and approaches to apply to individual stakeholders

This section provides details on the kind of information to capture in each column of the Stakeholder Analysis Matrix and Stakeholder Engagement Plan.

Stakeholder Analysis Matrix

Stakeholder organization, group or individual

Include the full, official name and title of the individual or organization (or department within the organization) and indicate whether this stakeholder represents national, regional or local interests. Here are some representative entries for this column:

Government sector

- Planning officers from the Division of Reproductive Health, Ministry of Health
- National planning department in the Ministry of Planning
- Health sector budget team from the Ministry of Finance
- Chief Medical Officer from the Ministry of Health
- Regional and district medical officers
- Regional and district AIDS control officers
- National AIDS commission M&E officer

Political sector

- Members of Parliament
- Parliamentary committee on population and health
- Platform representative from the national democratic party
- Platform representative from the national labor party

Commercial sector

- Executive director of the national pharmacy board
- Private hospital managers
- National federation of employers
- Capital city chamber of commerce

Non-governmental organizations and civil society

- Christian Health Association
- National Family Planning Association
- National Association of Nurse-Midwives

- International NGOs
- National AIDS NGOs consortium
- Editor or journalist of local or regional newspaper
- Organizations representing persons living with HIV/AIDS
- University researchers
- Private consulting organizations
- National medical association
- Community leaders

International donors

- World Bank
- UNAIDS (The Joint United Nations Programme on HIV/AIDS)
- WHO
- UNICEF
- USAID
- Other bilateral donors

Stakeholder description

Describe the primary purpose, affiliation and funding for this stakeholder individual or group. For example:

- Government-funded agency responsible for coordinating reproductive health services and training.
- Coordinating body for 530 local NGOs dealing with HIV/AIDS programs.
- Top officer responsible for giving clinical guidance to Ministry of Health leadership in clinical practices and medical facility administration.
- Private organization that provides international and local funding to orphans and vulnerable children.
- Provides policy advice and program support for member industries.

Potential role in the activity

Describe the stakeholder's potential role or vested interest in the activity. For example:

- Publicize the findings of the research activity.
- Provide technology support for setting up the M&E system.
- Perform policy analysis based on the research findings.
- Mobilize community support for the activity.
- Contribute private-sector funding for interventions.
- Train data collectors and analysts.

Level of knowledge of the issue

Identify the specific areas of expertise for the stakeholder. For example:

- Provides direct care to people living with HIV/AIDS and has perspectives on their experiences and needs.
- Good basic general knowledge but limited statistical capacity.
- Expertise on the political implications.
- Understands the ethical issues and constraints.
- Understands health finance issues.
- Has very little understanding of the issue but will soon be involved in decisions on the issue.
- Solid understanding of community perspectives on the issue.

Level of commitment

Does the stakeholder support or oppose the activity, to what extent, and why? This section of the matrix might include entries such as these:

- Strong commitment to orphans, understands the broad scale of the required interventions.
- Resistant to changes in current data collection procedures, because feels there is already too much reporting.
- Opposes this activity as a priority, due to time and resource constraints.
- Champion for expanding reproductive health services in the private sector.
- Needs information on the efficacy of a specific drug regimen to support the approval of a new protocol.
- Supports expansion of family planning programs.

Available resources

What staff, volunteers, money, technology, information or influence does this stakeholder have? For example:

- Supervises a staff of 10 quantitative specialists.
- Received a grant of \$50,000 for computer training skills.
- Small grants program for funding community operations.
- Has access to resource library of databases and datasets from previous data collection efforts.
- As a journalist, can raise public awareness about this issue.
- Meets on a regular basis with key decision makers and the minister of health.
- Executive director of medical association, has direct communication with 3,500 physicians through annual meetings and newsletters.
- Socially conscious celebrity serves as a public ambassador for the issue.

Constraints to participation

What limitations does this individual or organization have that would constrain active participation?

What other barriers to participation may exist? For example:

- Would require funding to participate.
- Severe staff shortages would limit participation.
- No local offices or staff.
- The organization's planning cycle occurs on a different schedule.

Stakeholder Engagement Plan information**Engagement strategy**

How will you engage this stakeholder in the activity? For example:

- Include in design team for the activity.
- Include in meetings to present the proposed research design.
- Solicit their comments for program approval.
- Involve in the research as a researcher.
- Include on the national advisory board.
- Include in national stakeholders meeting to review proposals.
- Name as a district representative for the program.
- Invite to presentations at meetings and conferences.
- Engage in consultations via group meetings.
- Invite to stakeholder meetings to review results of research.
- Involve in policy drafting teams.
- Involve in district, national or regional committees.
- Include in leadership training activities.
- Invite members of parliament to conferences.
- Provide support for parliamentary committees.
- Include in organized study tours of target areas.
- Involve in national publicity campaigns.
- Involve in developing action plans for using the findings.
- Engage in meetings with high-level officials.
- Present results on the Web to encourage broader data use.
- Support participation in international conferences.

- Form networks that link unrelated organizations through regular meetings or electronic communications or newsletter.
- Create public awareness through articles and editorials in the daily newspapers and professional journals.
- Encourage peer-level exchange of technical expertise and experiences within the country.

Follow-up strategy

Describe plans for continued involvement or communication with the stakeholder, providing feedback on the results and impact of the data activity, and fully acknowledging their contributions. For example:

- Continued involvement. The stakeholder could be involved in the established M&E review processes, included in committees that meet regularly, or invited to participate in related follow-on activities. The topic under study could be included as a regular agenda item for annual or biannual updates.
- Feedback mechanisms. This could include such activities such as sharing research reports, conducting meetings to discuss the annual reports of M&E data, or establishing a plan to disseminate national-level reports to their staff and regional and district organizations.
- Documentation. Document and share how information has been used for decision making. Where possible, include external validation, such as through newspaper articles, newsletters, and memos from finance and planning officials. This effort helps create continued awareness and appreciation of the importance of M&E efforts.

Sample Stakeholder Analysis Matrix

Program issue Develop plan (including M&E plan) to scale-up PMTCT programs throughout health system
 Proposed activity Convene stakeholders to identify priorities based on available data and develop action plan
 Date November 2006

| Name of stakeholder organization, group or individual National, regional or local? | Stakeholder description Primary purpose, affiliation, funding | Potential role in the issue or activity Vested interest in the activity | Level of knowledge of the issue Specific areas of expertise | Level of commitment Support or oppose the activity, to what extent, and why? | Available resources Staff, volunteers, money, technology, information, influence | Constraints Limitations: need funds to participate, lack of personnel, political or other barriers |
|---|---|---|---|---|---|--|
| Government sector | | | | | | |
| Division of Maternal and Child Health, MOH | Develops draft plans and monitors implementation of PMTCT, MCH, and FP programs and services. | Share information related to the division strategy for maternal health and identify opportunities to leverage resources and promote collaboration. | High level of knowledge of in-country program – monitors pilot PMTCT programs in MCH/FP facilities; low level of knowledge of international guidelines and studies. | Strongly support scale-up. The division's level of satisfaction with data sources is unknown. | Staff available and appropriated to assist with plan, strong influence among MCH facilities who will implement program. | Political tensions between division and NACC exist; MOH planning cycle is different from NACC's and problems in scheduling and funding may arise. |
| National AIDS Control Committee | Involved in planning, implementation, monitoring and evaluation of all HIV/AIDS programs in the country; approves donor and NGO-funded HIV/AIDS programs. | Facilitate the stakeholder meeting, prepares for meeting by identifying data sources and preparing an agenda that allows for the sources to be discussed. | High – receives reports on PMTCT activities from MCH division at MOH; medium level of knowledge of international guidelines and studies. | Strongly support the activity, but hesitant to use international data sources. NACC opposes use of the DHS and most recent international estimates as they consider these sources to overestimate HIV prevalence. | Staff available to facilitate; Room and computers available for meetings at NACC headquarters. | Staff supposed to facilitate process, but all have busy schedules; political tensions between NACC and MOH Division of MCH exist; MOH planning cycle different from NACC's and problems in scheduling and funding may arise. |

| | | | | | | |
|--|--|---|---|--|--|---|
| Medical Statisticians responsible for PMTCT, HIV, MCH on national level | Collects and reports current data on PMTCT, HIV, MCH and FP. | Prepare data related to PMTCT to be presented during a preliminary stakeholders meeting. Responsible for working with the MOH and NACC to determine the data needs for designing a PMTCT program. | High level of knowledge of data sources in the country; low level of knowledge of international guidelines and studies. | Supportive, willing to share information, less familiarity with data sources outside government sector. | Compendium of data from various sources on PMTCT; staff available to participate in planning. | Technical capacity to analyze various sources of data, including international sources, is lacking. |
| Medical staff from pediatric and antenatal clinics at regional and district levels | Implements PMTCT pilots and program on local levels. | Prepare case studies in the form of presentations and facility data to represent ongoing PMTCT pilots for stakeholders meeting; participate in program planning process. | Knowledge of own facility data, but no knowledge of national, state, or district data; average level of knowledge of international guidelines and studies.. | Highly supportive of implementing a PMTCT program throughout the country at all levels of the health system. | Staff interested in participating and informed about implementation and constraints of PMTCT pilots. | Lack funds and staff time for travel to stakeholders meeting and planning sessions. |
| Political sector | | | | | | |
| Parliamentary Committee on Population and Health | Develops laws and regulations related to providing PMTCT care; approves budget for implementation. | Will approve the PMTCT plan as a part of a broader Parliamentary program to address MCH. | Basic knowledge about needs for PMTCT services. | Strongly support program, but concerns about funding. | Strong influence – head of committee is leader in Parliament with strong ties to executive branch. | Lack of personnel to routinely attend stakeholders meetings and planning sessions. |
| Parliamentary members that advocate for MCH/HIV issues | Sponsor and advocate for laws related to providing PMTCT, MCH, and HIV care to their constituencies. | May serve as advocates at all levels (in Parliament, government, mass media) for improved and expanded PMTCT services. | Basic knowledge about needs for PMTCT services. | Strongly support program. | Strong influence. | Lack of personnel to routinely attend stakeholders meetings and planning sessions. |

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|--|--|---|---|---|--|---|
| Deputy Governor for Social Issues in State where PMTCT programs have been piloted and expanded | Responsible for monitoring health programs and informing other policymakers about importance of health programs/ issues. | Provide insight into pilot project, lessons learned, and advocate for improved and expanded PMTCT services. | Basic knowledge about needs for PMTCT services; extensive knowledge about pilot program in home region. | Strongly support program, and hopes to serve as center of excellence for other regions. | Strong influence among governors; staff available to present experiences. | May need travel funds to participate beyond initial visit to stakeholders meeting, seeking international sponsorship. |
| Commercial sector | | | | | | |
| Private health facility managers | Provide health services. | Provide data and information on their efforts to provide PMTCT services as well as the clinical protocols that they operate under; participate in program planning process. | Knowledge of own facility data, but no knowledge of national or subnational data; average level of knowledge of international guidelines and studies. | Highly supportive of implementing a PMTCT program throughout the country at all levels of the health system. | Staff interested in participating and informed about implementation and constraints of providing PMTCT services in private sector. | None |
| National Federation of Women Business Leaders | Advocate for, fund and implement programs aimed to improve the status and well-being of women. | Provide any data/ information the federation has produced related to PMTCT, serve as advocate for the program, and potentially financially supplement effort. | Basic knowledge about needs for PMTCT services. | Supportive of implementing a PMTCT program, which includes a focus on the woman during and following pregnancy (MTCT+). | Strong influence among business leaders for fundraising and advocacy efforts; staff and financial support available. | None |

| Non-governmental sector | | | | | | |
|--------------------------------------|---|---|--|---|---|--|
| National Family Planning Association | Provide family planning services nationally through network of clinics, serve as clearinghouse of information and training for providers. | Provide data and information on FP, including efforts to provide FP to PLWA; participate in planning process as key service provider. | Knowledge of FP facility data, but no knowledge of national or subnational data related to other parts of the PMTCT program; average level of knowledge of international guidelines and studies. | Supportive of general PMTCT program, but concerned about funding levels for FP services. | Staff interested in participating and informed about implementation and constraints of PMTCT pilots relating to FP services. | Lack funds and staff time for travel to stakeholders meeting and planning sessions. |
| PLWA Organizations | Advocate for programs and plans that support and meet the needs of PLWA. | Provide information to stakeholders about PLWA and patients' rights; serve as watchdog to ensure rights of PLWA seeking PMTCT services. | High level of information on case studies and anecdotal information about PLWA access to PMTCT services; basic knowledge and understanding of data. | Supportive of implementing a PMTCT program, which includes a focus on the woman during and following pregnancy (MTCT+). | Staff available to participate, case studies and information prepared, strong connections to international NGOs and donors. | Seeking financial sponsorship from international donors to fund travel and participation in process. |
| International NGOs | Organizations that provide funding and implement PMTCT programs. | Provide relevant data or information produced by the NGO to stakeholders, advise planning process and possibly implement programs. | High level of knowledge about PMTCT programs worldwide. | Strongly supportive of expanding successful model. | PMTCT Coordinator allocated to participate, access to quality data and information, providing assistance to NACC and MOH in preparing presentations and analyzing data. | Some financial limitations given by donors. |

| Other civil society target audiences | | | | | | | |
|--------------------------------------|---|--|---|--|--|---|--|
| Journalists | Provide information about PMTCT plans, programs and policies to population. | Inform public using data and information about PMTCT program and about planning process. | Basic knowledge about needs for PMTCT services. | Supportive of new program, but critical of government's current efforts to provide PMTCT nationwide. | Staff and funds allocated to covering this issue. | Seeking additional data and information for media efforts. | |
| University researchers/professors | Conduct research on PMTCT, provide recommendations to government and international NGOs on PMTCT programming. | Present relevant data or information produced by the university to stakeholders; advise planning process and conduct any necessary research per request of stakeholders. | High level of knowledge about data and information analysis, needs, etc. Most representatives have little to no clinical experience in providing PMTCT. | Supportive of new PMTCT program. | Staff available to participate due to donor funding; high level of technical capacity for producing quality data and reporting to decision makers; strong political influence. | Funding for any future research is pending. | |
| International donors | | | | | | | |
| GFATM | Provide funding, technical assistance, and advice to government and NGOs in planning and implementing PMTCT programs. | Observe process, provide advice, and incorporate plan into internal donor funding and planning cycle. | High level of knowledge about PMTCT programs worldwide and data. | Strongly supportive of expanding successful model. | PMTCT Coordinator allocated to participate, access to quality data and information, providing assistance to NACC and MOH other program areas; political influence. | None | |
| USAID | Provide funding, technical assistance, and advice to government and NGOs in planning and implementing PMTCT programs. | Observe process, provide advice, and incorporate plan into internal donor funding and planning cycle. | High level of knowledge about PMTCT programs worldwide and data. | Strongly supportive of expanding successful model. | PMTCT Coordinator allocated to participate, access to quality data and information, providing assistance to NACC and MOH in other program areas; political influence. | Limited ability to shift funding to refocus on PMTCT for at least one year. | |

Sample Stakeholder Engagement Plan

Program issue **Develop plan (including M&E plan) to scale-up PMTCT programs throughout health system**

Proposed activity **Convene stakeholders to identify priorities based on available data and develop action plan**

Date **November 2006**

| Stakeholder organization, group or individual | Potential role in the activity | Engagement strategy How will you engage this stakeholder in the activity? | Follow-up strategy Plans for feedback or continued involvement |
|--|---|---|---|
| Government sector | | | |
| Division of Maternal and Child Health, MOH | Share information related to the division strategy for maternal health and identify opportunities to leverage resources and promote collaboration. | Involvement in a key stakeholder meeting aimed to sensitize stakeholders currently involved in providing maternal health services. | Will be involved as a key stakeholder group during annual PMTCT program review meetings, help monitor the new PMTCT program outcomes. |
| National AIDS Control Committee | Facilitate the stakeholder meeting, prepares for meeting by identifying data sources and preparing an agenda that allows for the sources to be discussed. | The NACC is the lead in this activity. It will be important for the NACC to involve more specifically the PMTCT coordinator, clinical care coordinator and National AIDS Program coordinator. | The NACC is responsible for following up with the stakeholders prioritized. |
| Medical Statisticians responsible for PMTCT, HIV, MCH on the national level | Prepare data related to PMTCT to be presented during a preliminary stakeholders meeting. Responsible for working with the MOH and NACC to determine the data needs for designing a PMTCT program. | Identify a point person to work with in discussing NACC data needs for PMTCT and the appropriate format. | Include point person in NACC discussions regarding program progress. Explore formalizing a relationship (if there is not one) between the MOH statistics office and the NACC. Involve as presenters at preliminary meeting, and in subsequent monitoring efforts. |
| Medical staff from pediatric and antenatal clinics at the regional and district levels | Prepare case studies in the form of presentations and facility data to represent ongoing PMTCT pilots for stakeholders meeting; participate in program planning process. | Involvement in a key stakeholder meeting aimed to sensitize stakeholders currently involved in providing maternal health services. | Select participants that are service providers will be invited to subsequent PMTCT planning meetings. |

| Political sector | | | |
|--|---|--|---|
| Parliamentary Committee on Population and Health | Will approve the PMTCT plan as a part of a broader Parliamentary Program to address MCH. | Involvement in key stakeholder meeting to garner interest for expanding PMTCT program. | Provide updates on planning process and request review of final draft of PMTCT program. |
| Parliamentary members that advocate for MCH/ HIV Issues | May serve as advocates at all levels (in Parliament, government, mass media) for improved and expanded PMTCT services. | Involvement in key stakeholder meeting to garner interest for expanding PMTCT program. | Provide updates on planning process and request review of final draft of PMTCT program. |
| Deputy Governor for Social Issues in State where PMTCT programs have been piloted and expanded | Provide insight into pilot project, lessons learned, and advocate for improved and expanded PMTCT services. | Involvement in a key stakeholder meeting aimed to sensitize stakeholders currently involved in providing maternal health services. | No planned involvement beyond initial stakeholders meeting. |
| Commercial sector | | | |
| Private health facility managers | Provide data and information on their efforts to provide PMTCT services as well as the clinical protocols that they operate under; participate in program planning process. | Involvement in a key stakeholder meeting aimed to sensitize stakeholders currently involved in providing maternal health services. | Select participants that are service providers will be invited to subsequent PMTCT planning meetings. |
| National Federation of Women Business Leaders | Provide any data/ information the federation has produced related to PMTCT, serve as advocate for the program, and potentially financially supplement effort. | Involvement in a key stakeholder meeting aimed to sensitize stakeholders currently involved in providing maternal health services. | No planned involvement beyond initial stakeholders meeting. |
| Non-governmental sector | | | |
| National Family Planning Association | Provide data and information on FP, including efforts to provide FP to PLWA; participate in planning process as key service provider. | Involvement in a key stakeholder meeting aimed to sensitize stakeholders currently involved in providing maternal health services. | Select participants that are service providers will be invited to subsequent PMTCT planning meetings. |
| PLWA Organizations | Provide information to stakeholders about PLWA and patients' rights; serve as watchdog to ensure rights of PLWA seeking PMTCT services. | Involvement in key stakeholder meetings. | No planned involvement beyond initial stakeholders meeting. |

| | | | |
|--------------------------------------|--|--|---|
| International NGOs | Provide relevant data or information produced by the NGO to stakeholders, advise planning process and possibly implement programs. | Involvement in key stakeholder meeting to garner interest for expanding PMTCT program. | Continue to engage in planning process by inviting to planning meetings and requesting data and other assistance. |
| Other civil society target audiences | | | |
| Journalists | Inform public using data and information about PMTCT program and about planning process. | Opportunity to cover key stakeholder meeting and process of developing PMTCT program. | Provide accurate and relevant data and information to engage mass media. |
| University researchers/ professors | Present relevant data or information produced by the university to stakeholders; advise planning process and conduct any necessary research per request of stakeholders. | Involvement in key stakeholder meeting to garner interest for expanding PMTCT program. | Request assistance and/or subcontract future research efforts to inform planning and M&E. |
| International donors | | | |
| GFATM | Observe process, provide advice, and incorporate plan into internal donor funding and planning cycle. | High level of interest in attending key stakeholder meeting. | Continue to engage in planning process by inviting to planning meetings and requesting data and other assistance. |
| USAID | Observe process, provide advice, and incorporate plan into internal donor funding and planning cycle. | High level of interest in attending key stakeholder meeting. | Continue to engage in planning process by inviting to planning meetings and requesting data and other assistance. |

Conclusion

Improving the quality and use of data

Building broad-based ownership and perspective into the design, execution, and application of data initiatives

Data collection systems are often designed and developed with a singular goal. As a result, huge volumes of data are created, but little may actually be used to directly benefit programs and people.

Does the program or intervention serve all the people it is intended to serve?

Are we making progress toward improving health and welfare?

If not, what should be done differently?

The extent to which program managers can answer these questions is oftentimes related to how well data initiatives have incorporated the broad perspectives of key stakeholders—from the highest levels of influence to the people directly affected by the issue under study.

Here is where the Stakeholder Engagement tool can be invaluable. Using a straightforward matrix, this tool facilitates a structured process for:

- Identifying stakeholders.
- Defining their potential roles in the activity.
- Identifying the resources they can bring to bear.
- Identifying dynamics among stakeholders.
- Setting the optimum stakeholder group.
- Creating an engagement plan.
- Tracking stakeholder engagement throughout the project.

Through these steps, the tool promotes the key goals of improving the quality and use of data.

- By inviting diverse and relevant viewpoints into design processes, Stakeholder Engagement ensures that project design thoroughly reflects cultural, political, economic and social realities. *The data will be useful.*
- By enabling people to gain ownership of the data activity, Stakeholder Engagement increases their commitment to quality in data collection and increases their trust in and use of the data for subsequent analysis and decision-making. *The data will be used.*

Ultimately, Stakeholder Engagement practices help ensure that new M&E initiatives are designed to deliver real-world benefits, improving the general health and welfare of a population.

Acknowledgments

The Stakeholder Engagement tool was created by Shannon Salentine and Alan Johnston, specialists in the Data Demand and Information Use team of MEASURE Evaluation, with assistance from Roger Schimberg at Tulane University and Karen Hardee at Constella Futures.



PRISM Tools

Performance of Routine Information
System Management — Four tools to improve
the quality and use of routine health data

Data Demand and Information Use
Part Two: Strategies and Tools

MEASURE Evaluation
www.cpc.unc.edu/measure

PRISM Tools

The ministry of health was concerned that district and facility staff rarely used routine data to identify performance gaps, make plans, and monitor progress. Information was available; why was it being used only to populate reports and not to drive decisions and program improvements?

PRISM Tools provided a structured way for the ministry to assess the quality of data and use of information in its routine health information system. The findings were revealing. Data errors were very high, due in part to overly complex data collection forms, inaccurate transfer of data from patient records, and calculation errors.

The PRISM assessment led to the design of easy-to-use forms, a refresher training course in data collection and processing for health workers, and a series of meetings and publications to share performance results and successes.

Scenario

Why are these tools important?

Routine health information systems generate potentially useful data, but it is often of low quality and not trusted for decision making

The ultimate objective of a routine health information system (RHIS) is to produce information for taking action in the health sector. “Are we doing things right?” “Are we doing the right things?” If things are being done correctly, the data should demonstrate that all activities were carried out as planned. Positive results should follow.

However, the systems designed to track health data often fall short:

- ❑ Data quality may be low, so nobody has faith in it.
- ❑ Data quality may be sufficient, but there are no processes or channels in place for using the data, other than completing reports to send to district and national authorities.
- ❑ Managers and staff might not appreciate the importance of their roles in the information process, and they have little incentive to give data processes the care and attention necessary.

“The data collection forms are too complicated.” ... “I did not like mathematics, and now I have to deal with data.” ... “What is the use of collecting data when nobody uses it?” ... “Upper management is not committed to RHIS activities.” ... Attitudes such as these—whether they reflect reality or misperception—can undermine the effectiveness of any RHIS program.

If a routine health information system is to produce all the value it should, it must produce high-quality data—actionable insights framed on accurate facts. This information must be actively used to guide day-to-day operations, track performance, learn from past results and improve accountability.

However, this has not been the scenario in most developing countries. RHIS systems often do not provide the information needed to improve health system performance. Why? Traditional assessments only answer part of the question, because they look narrowly at technical issues, such as data collection methods or Information Technology. Interventions then have limited impact, because the success of

an RHIS framework depends on far more than technical capabilities:

- ❑ Is the organization committed to a culture of using information?
- ❑ Do the people responsible for data collection have the necessary skills?
- ❑ Do they understand and care about the importance of their work?
- ❑ Do managers support them with training, supervision and needed resources?

Issues such as these have a profound influence on RHIS success.

MEASURE Evaluation, together with John Snow, Inc., developed a conceptual framework that acknowledges the broader context in which RHIS operates. Known as PRISM (Performance of Routine Information System Management), this conceptual framework broadens the analysis of routine health information systems to include three key factors for success:

- ❑ Behavioral determinants—The knowledge, skills, attitudes, values, and motivation of the people who collect and use data.
- ❑ Technical determinants—Data collection processes, systems, forms, and methods.
- ❑ Organizational/environmental determinants—Information culture, structure, resources, roles, and responsibilities of the health system and key contributors at each level.

The PRISM conceptual framework and PRISM Tools identify strengths and weaknesses in these areas, as well as correlations among areas. This assessment aids in designing and prioritizing interventions to improve RHIS performance—which in turn improves the performance of the health system.

The RHIS is an important mechanism to identify gaps in the management of the health system—and to resolve them to maintain and improve performance. With timely, complete and accurate information, managers can identify strengths and weaknesses of health system functions and services, and take appropriate action to maximize success. For issues outside of their control, they can advocate for possible solutions and policy changes.

Description

What do these tools do?

Support RHIS improvements by objectively measuring performance and identifying the factors that hinder performance

The PRISM toolset includes four tools for assessment, design, and monitoring and evaluation. A combination of questionnaires, data collection methods, and processes, these tools serve the following key purposes:

- ❑ Assess the performance of a routine health information system.
- ❑ Identify technical, behavioral, and organizational factors that affect RHIS performance.
- ❑ Aid in designing and prioritizing interventions to improve performance.
- ❑ Support ongoing efforts to monitor and evaluate data quality and use in decision making.

Assess the performance of a routine health information system.

PRISM Tools provide the methods to objectively measure data quality and the degree to which information is used for evidence-based decision making. For example, all health facilities in a district were submitting monthly RHIS reports to the district health office, but only 50 percent of the data in the reports were accurate when compared to patient records. Information was not used for decision making; the district office did not systematically review RHIS information.

Provide evidence on the factors that affect RHIS performance.

PRISM Tools identify specific technical, behavioral, and organizational factors that affect RHIS performance. For example, in the case above, RHIS performance was hindered by complicated data collection registers and forms, lack of motivation of staff to collect data, and their lack of understanding of the utility of that data. Senior managers were not interested in using the information that was collected.

A key advantage of PRISM Tools is the focus on behavioral and organizational determinants, and how these issues relate to technical determinants. The PRISM approach clarifies whether technical, behavioral and organizational determinants have influenced performance directly or are mediated through behavioral factors. For example, the most sophisticated computer network available could still produce fallible data if management has not established a culture that fosters staff knowledge, best practices, and motivation.

The PRISM assessment, therefore, provides a holistic picture of the existing information system—an informed, real-world perspective from which to design the most effective improvements.

Aids in the design of interventions to improve RHIS performance.

A PRISM assessment identifies which technical, behavioral, and organizational determinant(s) should be modified to improve RHIS performance. For example, one PRISM assessment led to proposals for the following interventions:

- ❑ Simplification of data collection forms.
- ❑ Refresher training in data collection and processing for health workers.
- ❑ Regular publication of a newsletter to show success stories of where information was used to improve health facility performance.
- ❑ Regular monthly staff meetings to monitor health facilities' performance against objectives using RHIS data.

Support ongoing efforts to monitor and evaluate data quality and use.

PRISM Tools can be used in a supervisory capacity to continuously monitor data quality and use and to evaluate RHIS performance over time and gauge the efficacy of designed interventions to improve the information system.

PRISM Tools can be adapted and applied at international, national or sub-national levels. The tools can be adapted to reflect variances in RHIS design, decision-making processes and stakeholders. The tools described in this document have been designed for a routine facility-based health information system. However, the tools can be adapted for other data sources, such as vital events registration systems, or non-routine health information systems, such as surveys.

Audience

Who should use these tools?

People involved in the collection, analysis and use of data in routine health information systems

PRISM Tools are used by four principal types of users:

(1) MEASURE Evaluation representatives:

- Establish relationships with host-country contributors.
- Present the PRISM Tools questionnaires.
- Help adapt PRISM Tools for the host-country setting.
- Facilitate and mentor host-country staff as they conduct the RHIS assessment using PRISM Tools.
- Provide technical assistance in obtaining and interpreting information and designing intervention(s).
- Use the Tools to monitor progress in RHIS performance and evaluate the impact of designed interventions.

(2) Host-country decision makers, such as program managers and other key stakeholders:

- Participate in the RHIS assessment.
- Use the Tools to identify and address RHIS performance gaps.
- Institutionalize findings of the assessment, to maintain and improve RHIS performance and decision making.

(3) A designated RHIS program manager:

- Selects the stakeholders to adapt and implement the PRISM Tools.
- Ensures appropriate representation and authority on the team with individuals who can champion decisions in their areas of influence.
- Monitors the development, use, and updating of the Tools.

(4) RHIS specialists or consultants:

- Contribute their knowledge in adapting the tools.
- Learn, use, and promote the tools.
- Document the experience using PRISM to assess the RHIS framework, implement improvements, monitor performance, and evaluate progress—to contribute to the greater knowledge base of best practices.

Timing

When would these tools be used?

For best results, PRISM Tools should be used regularly—and whenever specific needs emerge.

Since a health information system routinely produces data at regular intervals, PRISM Tools should be used routinely as well—especially the tools designed to assess data quality, use of information, and RHIS management support. These tools can be applied quarterly, every six months, or once a year. PRISM Tools can also be used to obtain a baseline assessment of an existing RHIS framework or for evaluating the RHIS reform process.

Applications

Who has already used these tools?

Representative field applications

Mexico – 2005-2006

Assessment of the health information system in Mexico

The Ministry of Health had identified poor use of information for decision making at all levels as the main RHIS issue. The Ministry used the organizational and behavioral questionnaire from the PRISM Tools to supplement a more typical, technical RHIS assessment. MEASURE Evaluation provided technical assistance in using and analyzing the data from this assessment.

South Africa – September 2005

RHIS training course, University of Pretoria, South Africa

In collaboration with the University of Pretoria, MEASURE Evaluation organized a two-week, hands-on course for African RHIS managers from 20 countries to use the PRISM Tools for RHIS improvement. Follow-up technical assistance is being provided to strengthen managers' capacity to organize RHIS reforms.

Pakistan – August 2002 and October-December, 2005

National HMIS Cell, Ministry of Health, Pakistan

MEASURE Evaluation carried out a health management information system (HMIS) situation analysis. This analysis enabled MEASURE Evaluation to develop a training manual for district managers on use of information. In 2006, 250 district managers in 10 districts received training using this manual.

Pakistan – June-August 2005

The study of reforming health information systems in Pakistan

MEASURE Evaluation provided technical assistance to a JICA-funded study, using PRISM Tools to assess existing health information systems and develop a reform package. PRISM Tools identified strengths and weaknesses in existing information systems and supported design of a reform package that included a pilot test of revised data collection forms, continuous data-quality assessment using LQAS, a supervisory checklist, and development of a long-term plan.

Uganda – January 2003

Situation Analysis of HMIS and EMIS, Uganda

MEASURE Evaluation provided technical assistance to a study for the UPHOLD/JSI project supported by USAID. In this project, the ministries of Health and Education used PRISM Tools to assess district-level social sector information systems (for both health and education). The assessment enabled the Ministry of Health to develop an effective training manual for improving RHIS performance and ongoing processes for assessing data quality using LQAS. The assessment also triggered dialog about initiating a routine education information system.

The four PRISM Tools

Reflecting the PRISM conceptual framework

Determinants of RHIS performance

The PRISM conceptual framework sets forth the premise that the success of RHIS depends on success in three inter-related areas: technical, organizational and behavioral conditions. Unlike traditional assessments, which focus primarily on technical issues, the PRISM Tools look at the determinants of RHIS performance in all three areas.

The PRISM Tools include the following four tools:

- **RHIS Performance Diagnostic Tool.** The primary component in the toolset, this determines the overall level of RHIS performance, looking separately at quality of data and use of information, to identify weak areas. This diagnostic tool identifies strengths and weaknesses; the other three tools identify the underlying technical, organizational, and behavioral reasons for those strengths and weaknesses.
- **RHIS Overview and Facility/Office Checklist.** This examines technical determinants such as the structure and design of existing information systems in the health sector, information flows, and interaction between different information systems. This tool is used to understand the availability and status of RHIS resources and procedures used at health offices and facilities.
- **Organizational and Behavioral Questionnaire.** This looks at behavioral and organizational factors that affect RHIS performance. Do staff have the necessary knowledge, skills, problem-solving ability, confidence and motivation? Does the organization promote a culture that values information quality and use? Comparing these factors with RHIS performance identifies gaps and opportunities for improvements.
- **RHIS Management Assessment Tool.** This is designed to rapidly take stock of the management and supportive practices of RHIS, and to aid in developing recommendations for RHIS management.

PRISM Figure 1

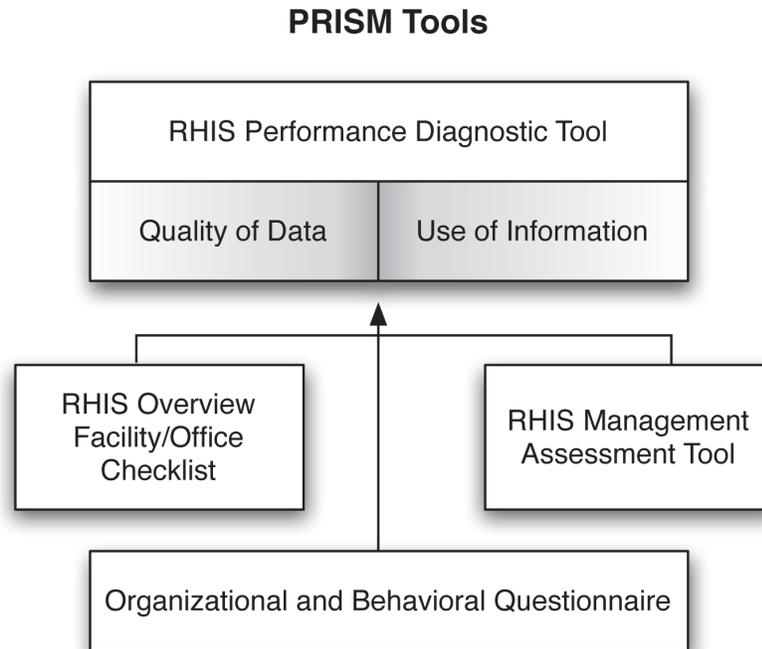


Figure 1 shows how these tools relate to one another. Collectively, these tools provide a comprehensive picture of RHIS performance and its contributing factors—technical, organizational, and behavioral.

The PRISM Tools, which includes four tools that reflect technical, organizational and behavioral determinants of RHIS performance, were created by Anwer Aqil, Dairiku Hozumi and Theo Lippeveld, specialists on the RHIS team of MEASURE Evaluation at John Snow, Inc.; with assistance from Mounkaila Abdou of JSI and Alan Johnston of Constella Futures.

Guiding Principles

The PRISM Tools approach

Issues and considerations for using this tool

PRISM Tools are based on an holistic approach to health interventions, as well as systems thinking and modeling. This approach acknowledges that:

- ❑ RHIS performance depends on a combination of technical, organizational, and behavioral factors.
- ❑ Each component and contributor in the system contributes to the whole system—and the whole is more than the sum of its parts.
- ❑ The causal influences of all determinants in all three areas must be understood to be able to improve health system performance.

Data quality depends on human factors.

- ❑ When data collectors understand the importance of their contributions to the routine health information system, they will be more committed to producing high-quality data and analysis.
- ❑ When decision makers believe they have high-quality data at hand, they are more likely to use that data for evidence-based decisions.
- ❑ When people are empowered to make decisions and act upon them, they become champions for creating accountability and transparency through information sharing.

PRISM Tools identify issues related to these dimensions and help in designing ways to resolve them.

Health system managers and other stakeholders must have ownership.

An organization can apply PRISM Tools to discover how to address its deficiencies, but investments in RHIS reform will require buy-in and commitment from many levels of the organization. So, it is important to include a broad base of RHIS and program staff at all levels of the health system in the assessment phase—and to engage senior managers in designing interventions and incorporating the PRISM process as a regular activity.

When the organization creates a sense of ownership, RHIS initiatives become the responsibility of all members of the organization. Ownership ultimately leads to the sustained investments required for continuous improvement.

PRISM assessments use a collaborative and iterative process.

Collaborative. Program managers or other staff can adapt and use PRISM Tools to perform their own assessments. However, an external consultant (such as a MEASURE Evaluation representative) can be of great assistance as a facilitator.

Iterative. The PRISM process is iterative in two senses:

- ❑ The RHIS performance improvement process involves several stages: preparation (with stakeholder analysis), assessment/analysis, planning, action, and evaluation—and each phase involves meetings among implementers and key stakeholders.
- ❑ The PRISM process should be repeated every three, six, or 12 months to gauge the results of past interventions and start a new RHIS improvement cycle.

Triangulation and multiple data sources increase validity of the findings.

PRISM Tools use various data sources and methods to collect information:

- ❑ Self-administered questionnaires
- ❑ Observations
- ❑ Reviews of documents, office records, and RHIS feedback reports
- ❑ Information technology review

For instance, the RHIS Performance Diagnostic Tool and the RHIS Overview and Facility/Office Checklist use observations and interviews, supplemented by document research. The

RHIS Management Assessment Tool uses key informant interviews and group discussions. The Organizational and Behavioral Questionnaire collects data via self-administered questionnaires.

The RHIS Performance Diagnostic Tool uses triangulation to visually represent factors that have multiple components. For example, data quality depends on accuracy, timeliness and completeness. Data handling relies on data recording, processing, and transmission. Scores on these dimensions can be triangulated, which makes it easy to grasp the relationships, where gaps exist, and where interventions could have the most impact.

PRISM Tools are flexible and adaptable.

Flexible. The PRISM Tools were designed with the assumption that the organization has established a minimum set of RHIS processes, practices and infrastructure. Since they address elements that would be common to most any RHIS, the tools are broadly applicable to diverse organizations. The tools can be used to assess both categorical and integrated information systems, in public- and private-sector RHIS frameworks.

Adaptable. Users can modify the tools to match the socio-demographic characteristics of respondents in a given organization. Similarly, the content of a tool can be adapted to meet the specifics of the given situation. The collected data can be analyzed manually or entered in any data analysis program such as Excel, EpiInfo, etc.

PRISM Tools should be seen as working documents, and extended and revised as an RHIS develops or changes.

PRISM Tools encourage continuous learning and improvement.

PRISM Tools identify and encourage opportunities to develop the RHIS into a system not just for reporting statistics to higher authorities, but also for monitoring the performance of health systems.

“Are we doing a good job providing health services to our target populations?” ... “Are we doing better than last year?” ... “Did our new training programs have a visible impact?” ... When the RHIS can answer these questions, organizations can learn from their experiences, lobby more effectively for funding and other resources, and continuously improve health systems for the benefit of more people.

Process Action Plan

For using PRISM Tools

Five steps

Step 1. Identify the need.

This step relies on communication with MEASURE Evaluation representatives in-country.

1.1 Identify a potential opportunity.

Communicate with MEASURE Evaluation colleagues and host-country counterparts to be alerted to opportunities for implementing the PRISM Tools. Sometimes the opportunity becomes clear when MEASURE Evaluation is asked to provide assistance in assessing or improving an existing health information system.

1.2 Determine how PRISM Tools would be used for this need.

Will it be used to reform RHIS, or as part of ongoing supervisory mechanisms to fine-tune day-to-day operation of an existing RHIS? This perspective will influence certain aspects of this process, such as which part of (or all of) the PRISM Tools will be used, which stakeholders should be involved, and what types of actions will be recommended.

For cases where all four PRISM Tool will be used, it is best to use them in this order:

1. RHIS Performance Diagnostic Tool
2. RHIS Overview and Facility/Office Checklist
3. Organizational and Behavioral Questionnaire
4. RHIS Management Assessment Tool

Step 2. Perform pre-assessment planning.

2.1 Determine the organization's readiness to improve its RHIS.

An RHIS improvement plan could entail small interventions in specific areas—or a major overhaul of the system. Even if the intervention is modest (small but important actions should be considered before attempting a large-scale project), the target organization must be ready to engage in the process. That means the organization will have:

- Leaders who will champion improvements.
- The necessary resources to move forward.
- A strategic vision that embraces a culture of information.
- People who can implement (and institutionalize) RHIS improvements.

2.2 Assemble a core team of stakeholders.

A formal or informal stakeholder analysis can help in identifying the relevant stakeholders, and their level of interest and availability. Having identified these individuals, one or more teams need(s) to be organized to carry out the assessments, design and implement interventions.

2.3 Identify key informants to interview.

Even if good knowledge of local RHIS practices is believed to exist, it is recommended that interviews with key stakeholders in RHIS management be conducted. Stakeholder analysis will help in identifying the right people to interview. A sample of people who can offer different perspectives about the RHIS such as managers, decision makers and health facility staff should be selected.

2.4 Modify the tool(s) as appropriate for the application.

The statements and questions included in the tool should be reviewed and revised to align with the RHIS setting. Some statements and stages described in the tools might not be relevant. For example, the management assessment tool assumes relatively low availability and usage of computers in health system management. If computers are prevalent in the RHIS being assessed, focus might be placed on the status of computer-related training or Internet access.

Step 3. Assess and analyze current RHIS performance.

In this step, the PRISM leader or team would:

- 3.1 Use the PRISM Tools to assess the situation of RHIS performance.**
Detailed instructions for using each PRISM Tool, scoring and analyzing the results are found in the document, “Overview of the PRISM Tool Package,” available from MEASURE Evaluation.
- 3.2 Analyze the results and interpret the information.**
It can be helpful to have the RHIS improvement team complete the analysis worksheets as a group, or complete them individually and present their scores in a group. Either way, any large differences in scoring can be reviewed and resolved.
- 3.3 Build consensus on the present situation and directions for improvement.**
Working with key stakeholders, the RHIS improvement process includes development of a set of recommendations to address issues, weaknesses, and problems—or build on identified strengths.
- 3.4 Document and disseminate findings.**
Results of the assessment and recommendations should be communicated to various stakeholders as appropriate. For example, some details of findings and recommendations might be communicated in internal meetings, only to people directly involved in RHIS management. Other findings may be displayed for all staff members.

Step 4. Define a plan for reaching the desired level of RHIS performance.

Given the analysis created in the previous step—and considering the overall goals of the organization—the PRISM leader/team will:

- Define strategies and activities to achieve the improvements identified in Step 3.
- Establish objectives along the way to achieve these goals.
- Assign responsibilities and timelines for each objective.
- Write and communicate an action plan.

The perspectives of RHIS managers and health service managers should be solicited in the scoring process. Their involvement will increase their sense of ownership in the results, which in turn may lead to stronger commitment to implement the recommended improvements.

Step 5. Implement the plan and monitor progress.

The RHIS improvement team will coordinate activities and monitor progress throughout the planning and implementation of improvements—and will evaluate the success of the plan. PRISM Tools can be used for evaluating the interventions.

Checklist

For using PRISM Tools to assess an RHIS

This checklist can be photocopied to use as a reference for the process steps.

This checklist ensures that a systematic approach and best practices have been followed.

- Step 1. Identify the need.**
 - 1.1 Identify a potential opportunity to apply the PRISM Tools.
 - 1.2 Determine how PRISM Tools would be used for this need.
- Step 2. Perform pre-assessment planning.**
 - 2.1 Determine the organization's readiness to improve its RHIS.
 - 2.2 Engage core stakeholders and set up an RHIS improvement team.
 - 2.3 Identify key informants to interview in the assessment phase.
 - 2.4 Modify the Tool(s) as appropriate for the application.
- Step 3. Assess and analyze current RHIS performance.**
 - 3.1 Use the PRISM Tools to assess the situation of RHIS performance.
 - 3.2 Analyze the results and interpret the information.
 - 3.3 Build consensus on the present situation and directions for improvement.
 - 3.4 Document and disseminate findings.
- Step 4. Define a plan for reaching the desired level of RHIS performance.**
 - Define strategies and activities to achieve RHIS improvements.
 - Establish objectives along the way to achieve these goals.
 - Assign responsibilities and timelines for each objective.
 - Write and communicate an action plan.
- Step 5. Implement the plan and monitor progress.**

Conclusion

More effective health information systems...

lead to better health status for more of the population

The ultimate goal of a routine health information system is to produce meaningful insights about the performance of the health system.

"Has our HIV/AIDS pre-test counseling been effective in increasing the number of people willing to be tested?"

"How does the incidence of malaria in our district compare with others? With last year?"

"Have we reached more pregnant women with ante-natal care?"

Routine health information should provide credible answers, which will guide the most effective decisions about resources, processes and programs. However, the RHIS process often falls short. There may be a deficit in data quality, or a lack of channels to share and use good data, or little incentive to even care about data.

This is a scenario in which PRISM Tools can prove invaluable. These four tools enable an RHIS improvement team to:

- Assess the performance of a routine health information system.
- Identify technical, behavioral and organizational determinants of RHIS performance.
- Design and prioritize interventions to improve RHIS performance.
- Monitor and evaluate data quality and use over time.

The result is a process of periodic or cyclic improvements that produce a sequence of benefits:

Better systems produce more complete, accurate and timely data.

Better data are trusted by decision makers for evidence-based decisions.

Evidence-based decisions lead to more effective health programs.

Stronger health programs improve the health status of a population.

Furthermore, the PRISM process encourages stakeholders at all levels to think strategically and holistically about the value of each role/component of the RHIS, and to adopt a sense of ownership in improving those elements within their span of control.

The PRISM Tools Template

Applying the tools

To assess and improve the performance of a routine health information system

Blank versions of the PRISM Tools template in Microsoft Word format are available for download from the MEASURE Evaluation Web site, <http://www.cpc.unc.edu/measure>.