

# Tools for Data Demand and Use in the Health Sector

Assessment of Data Use Constraints



**MEASURE** Evaluation  
MANUAL

# Assessment of Data Use Constraints

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## 1 PURPOSE

Data is often not used in decision-making and the barriers inhibiting data use are unknown.

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? 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. The practical utility of health information—how often and how effectively data is

used or not used—is determined by multiple factors that can be categorized into three general categories: 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. The Assessment of Data Use Constraints tool focuses on these categories and uncovers issues in the areas that can usually be addressed with targeted interventions.

## 2 DESCRIPTION

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

The Assessment of Data Use Constraints is a rapid assessment tool 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 barriers and constraints.

The Assessment of Data Use Constraints can be applied at the national, sub-national or organizational level. Two sets of interviewing guides have been developed to accommodate the different needs of users when assessing barriers to data use. The first interviewing guide, *Version 1: National and Sub-national*, is a rapid assessment tool that aims to provide a broad view of constraints at the national and sub-national levels by collecting information from decision-makers on their current use of data and on their perceptions of the constraints to data use for evidence-

based decision making. For the purposes of this assessment “decision-makers” are defined as those individuals in a position to make decisions on policies or operational protocols and guidelines, on project designs and plans, and on resource allocation such as such as national and district-level policymakers and program managers.

The second interviewing guide is intended to be used among staff working at the health facility level. **Version 2: Facility** aims to provide an understanding of constraints to both generating and using data at lower levels of the health system, such as health facilities, therefore separate interviewing guides for data users (program managers, clinical staff) and data producers (data clerks and managers, M&E staff) have been developed. Version 2 also provides more focus on individual and organizational constraints than Version 1. In addition to the interviewing guides, an action plan matrix is provided to help participants with the process of identifying interventions to address the barriers and constraints that are identified in the assessment. When the assessment looks at information processes within a single organization or group of health facilities, it can be incorporated into health information and organizational capacity-building assessments at the national and sub-national levels.

The third part of this tool is a matrix that assists the user in developing a plan for overcoming the barriers to data use identified in the interviews. The **Planning Matrix** allows the user to map out an approach that can be implemented over time. For each identified barrier, the matrix requires users to identify an intervention to overcome that barrier, the steps involved in implementing the intervention, the person(s) responsible for overcoming the barriers, other stakeholders that may be affected by the implementation of the intervention or stakeholders who may be needed to advocate for the intervention, and the general timeline within which the intervention should be implemented.

### **Identify the barriers and constraints to data use**

The assessment tools look 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? What prevents information sharing among decision-makers? The specific constraint areas are defined as follows:

- **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.

- **Individual constraints:** Many information systems suffer from shortages of skilled people to manage, interpret, and use the data; and motivation and incentive to generate high-quality data. 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 its service sites. Where was the problem? Why were the data not properly reported?

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 they can at least 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 antiretroviral 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.”

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.

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.

### **The tool is a rapid assessment tool**

Depending on the needs of the users, the available budget and timeline, a more thorough assessment tool may be needed. In this case, consider applying the PRISM tools presented later in this document. The assessment of data use constraints tool is intended to be a rapid assessment and is not representative of all barriers that may exist in the country/region/district/organization.

### **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.

Formal planning should follow-up the mapping process. The information 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. It is very easy for respondents to list things that are wrong with the system. The facilitator implementing the assessment will have to help respondents think about resources within their organizations that can be organized or leveraged for improvements. This goal explains why the tool focuses on organizational, technical and individual constraints. These are areas that can usually be addressed with targeted interventions.

Once the barriers and constraints in an information system are identified, the planning matrix can be used to address these barriers and develop M&E systems to either change what you can, or acknowledge (and work around) what you cannot change.

### **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. For example, this tool can be incorporated into a workshop for M&E staff, to help them think more strategically about constraints to data use approaches, and to address the constraints. In addition, the questionnaires are 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 hospitals in a particular district would use the standard set of questions for data users and producers but may include additional questions that focus on the district health office's role in data use. Adapt the questionnaire at the outset, then conduct two or three pilot interviews, and fine-tune the questionnaire again based on those initial experiences.

### 3 TEMPLATES

#### Key Informant Interview Questionnaire: Decision-Maker Perceptions

Version 1: National and Sub-national

Interview logistics		
Date		
Time Start/End	Start:	End:
Interviewer Name		
Title of Respondent		
Number of Years in this Position		
Specialization <i>(check all that apply)</i>	<input type="checkbox"/> Population, Health and Nutrition <input type="checkbox"/> Child Survival <input type="checkbox"/> HIV/AIDS	
Level	<input type="checkbox"/> National <input type="checkbox"/> District	
Responsibilities <i>(check all that apply)</i>	<input type="checkbox"/> Policy <input type="checkbox"/> Program	
Sector <i>(check one)</i>	<input type="checkbox"/> Private <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input type="checkbox"/> No (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?

<b>Technical constraints</b>	
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	What specific challenges have you experienced among your staff when it comes to using data? 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.
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**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?
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RA16	How does your organization support the prioritization and use of information in decision making?
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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?
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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	Are there risks associated with sharing information? If so what are they? Record the response and the respondent's openness or reluctance to answering this question.

<b>Closing thoughts</b>	
RA23	How does the political, social and economic environment affect your use of information in decision making? Probe respondent for various influences including the following: <ul style="list-style-type: none"> <li>• international priorities</li> <li>• NGO funding and donors</li> </ul>
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?

## Data Users Interview Questionnaire

Version 2: Facility

Note: Data users include staff who have decision-making responsibilities including senior managers, clinicians, laboratory and pharmacy staff, and counsellors.

Interview Logistics		
<b>Name of facility</b>		
<b>Facility type</b> ( <i>check one</i> )	<input type="checkbox"/> Referral hospital <input type="checkbox"/> District Hospital <input type="checkbox"/> Health centre (hospital affiliated and other health centers) <input type="checkbox"/> Health post/dispensary <input type="checkbox"/> Other (specify):	
<b>Ownership</b> ( <i>check one</i> )	<input type="checkbox"/> Public <input type="checkbox"/> Private <input type="checkbox"/> Mix	
<b>Date of interview</b>		
<b>Time Start/End</b>	Start:	End:
<b>Name of interviewer</b>		

Introduction
<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 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>The interview will last about 20 minutes. I will be using a questionnaire which includes questions about the type of decisions you make, what information you use for this purpose, and barriers to information use. I will also ask questions about and some other organizational issues.</p> <p>Are you willing to participate? <input type="checkbox"/> Yes <input type="checkbox"/> No (stop interview)</p> <p>I would like to tape record this session so that I will be able to make an accurate and complete transcription of my notes. Again, this information will not be shared with anyone outside of the research team—that is MEASURE Evaluation.</p>

<b>Respondent Background Information</b>			
Before we start the interview, I would like to record some background information.			
BI1	What is your job title?		
BI2	How long have you been in your current position?		
BI3	Do you supervise any staff at this facility?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

<b>Section 1: Information use for decision making</b>		
I would like to begin by asking you about your job responsibilities.		
1. Do you make or influence the following:		
a. Budget preparation/allocation	<input type="checkbox"/> Yes	<input type="checkbox"/> No
b. Staffing decisions	<input type="checkbox"/> Yes	<input type="checkbox"/> No
c. Medical supply and drug management	<input type="checkbox"/> Yes	<input type="checkbox"/> No
d. Planning clinical services	<input type="checkbox"/> Yes	<input type="checkbox"/> No
e. Service improvement (counseling practices, outreach, adding services)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
f. Other		
2. What type of data or information do you use for [read list]?		List response(s)
a. Budget preparation/allocation		
b. Staffing decisions		
c. Medical supply and drug management		
d. Planning clinical services		
e. Service improvement (counseling practices, outreach, adding services)		
f. Other		

3. Thinking about the two most recent decisions in which you were involved, please describe how you used data in the decision-making process. Please do not include individual patient records.

a.

b.

Section 2: Technical barriers to information use		
4. In general, do you face any challenges when trying to use facility data for decision making? Please explain.		
5. Over the past 6 months, have you encountered any of the following barriers when trying to use health data or information?		
a. Incomplete data	<input type="checkbox"/> Yes	<input type="checkbox"/> No
b. Poor quality data	<input type="checkbox"/> Yes	<input type="checkbox"/> No
c. Data was produced late or not at all	<input type="checkbox"/> Yes	<input type="checkbox"/> No
d. Data/information was not well presented	<input type="checkbox"/> Yes	<input type="checkbox"/> No
e. Other:		
<b>If "no" to Q5a–e, skip to Q7.</b>		
6. Have you provided feedback about these barriers to the management information systems/records management team?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
a. If yes, was the feedback addressed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
7. Do you feel you have the skills necessary to use data to make the kinds of decisions in which you are involved?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
8. Would you like training in [read list]?		
a. data collection	<input type="checkbox"/> Yes	<input type="checkbox"/> No
b. data analysis	<input type="checkbox"/> Yes	<input type="checkbox"/> No
c. data presentation	<input type="checkbox"/> Yes	<input type="checkbox"/> No
d. data use (planning, quality improvement)	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Section 3: Organizational barriers to information use			
9. Does your facility conduct regular staff meetings?	<input type="checkbox"/> Yes	<input type="checkbox"/> No (skip to Q12)	
10. What type of staff meetings are held?		11. How often are meetings held [read list]?	
a. Senior management	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Once a week <input type="checkbox"/> Once a month <input type="checkbox"/> Once a quarter (three months) <input type="checkbox"/> Less than every 3 months <input type="checkbox"/> Not applicable
b. Departmental/clinic	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Once a week <input type="checkbox"/> Once a month <input type="checkbox"/> Once a quarter (three months) <input type="checkbox"/> Less than every 3 months <input type="checkbox"/> Not applicable
c. All-staff	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Once a week <input type="checkbox"/> Once a month <input type="checkbox"/> Once a quarter (three months) <input type="checkbox"/> Less than every 3 months <input type="checkbox"/> Not applicable
d. Other:			
<b>If "no" to meeting type in Q11, mark "not applicable" in Q12.</b>			
12. Were data and information presented at the last meeting you attended?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Not Applicable
a. If yes, how was it used (Probe: types of decision making)?			
13. Does your facility receive feedback from management, MOH, or others about the facility's performance?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
a. If yes, please describe how feedback is provided?			

**Section 4: Other barriers to information use**

I would like to know your opinion about how strongly you agree with certain statements. There are no right or wrong answers, only expressions of your opinion on a scale from 1 (strongly disagree) to 5 (strongly agree). You have to determine first whether you agree or disagree with the statement.

Second, decide about the intensity of agreement or disagreement. This information will remain confidential and will not be shared with anyone, except presented as an aggregated data report. Please be frank and choose your answer honestly.

<b>At this facility, decisions are based on</b>	<b>Strongly Disagree</b>	<b>Somewhat Disagree</b>	<b>Neither Agree nor Disagree</b>	<b>Somewhat Agree</b>	<b>Strongly Agree</b>
14. Personal liking	1	2	3	4	5
15. Superiors' directives	1	2	3	4	5
16. Evidence/facts	1	2	3	4	5
17. Political interference	1	2	3	4	5
18. Cost considerations	1	2	3	4	5
<b>In your organization, superiors</b>					
19. Seek feedback from staff	1	2	3	4	5
20. Emphasize data quality in regular reports	1	2	3	4	5
21. Promote a culture of data use	1	2	3	4	5
22. Explain what they expect from staff	1	2	3	4	5
23. Share data with other facilities	1	2	3	4	5
<b>In your organization, staff</b>					
24. Are aware of their responsibilities	1	2	3	4	5
25. Are appropriately trained to use data	1	2	3	4	5
26. Rely on data for planning and monitoring set targets	1	2	3	4	5
<b>Personal</b>					
27. Collecting data makes me feel bored	1	2	3	4	5
28. Collecting data is meaningful to me	1	2	3	4	5
29. Collecting data gives me the feeling that it is needed for monitoring and facility performance	1	2	3	4	5
30. We've discussed a variety of different barriers to data use. Are there any that I have not mentioned that you would like to discuss?					
31. Do you have any suggestions about how to improve information use at your facility?					

## Data Producers Interview Questionnaire

Version 2: Facility

Note: Data producers include staff responsible for generating routine health information, such as health information officers, data analysts, clerks and managers. It is useful to interview data producers before data users, if possible, in order to understand the context in which information is produced and used at the facility.

Interview Logistics		
<b>Name of facility</b>		
<b>Facility type</b> ( <i>check one</i> )	<input type="checkbox"/> Referral hospital <input type="checkbox"/> District Hospital <input type="checkbox"/> Health centre (hospital affiliated and other health centers) <input type="checkbox"/> Health post/dispensary <input type="checkbox"/> Other (specify):	
<b>Ownership</b> ( <i>check one</i> )	<input type="checkbox"/> Public <input type="checkbox"/> Private <input type="checkbox"/> Mix	
<b>Date of interview</b>		
<b>Time Start/End</b>	Start:	End:
<b>Name of interviewer</b>		



Introduction
<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 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>The interview will last about 20 minutes. I will be using a questionnaire which includes questions about the type of decisions you make, what information you use for this purpose, and barriers to information use. I will also ask questions about and some other organizational issues.</p> <p>I would like to tape record this session so that I will be able to make an accurate and complete transcription of my notes. Again, this information will not be shared with anyone outside of the research team—that is MEASURE Evaluation.</p> <p>Are you willing to participate? <input type="checkbox"/> Yes <input type="checkbox"/> No (stop interview)</p>

Respondent Background Information			
Before we start the interview, I would like to record some background information.			
BI1	What is your job title?		
BI2	How long have you been in your current position?		
BI3	Do you supervise any staff at this facility?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Section 1: Data and information flow		
1. Please describe the data management team's role in the flow of information on the project? (Probe: Preparation of reports to donor/ MOH, generating HMIS reports)		
2. What data do you make available to staff?	3. In what format is it reported?	4. How frequently is the data reported?
a.	a.	a.
b.	b.	b.
c.	c.	c.

**Section 2: Data utilization**

5. Are data and information used at this facility to inform managerial, administrative or clinical issues? If yes, please specify how it is used and by whom?

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6. Does the data management team receive feedback from staff about data/reports (probe: requests for additional analyses, feedback about the information being helpful or not clear)? Please describe.

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**Section 3: Barriers to data use**

7. What types of barriers do you think exist to staff using data at this facility [read list]?	Check response	
a. Staff lack of data analysis and interpretation skills	<input type="checkbox"/> Yes	<input type="checkbox"/> No
b. Perceived problems with completeness, quality, timeliness, and presentation of information	<input type="checkbox"/> Yes	<input type="checkbox"/> No
c. Data entry backlogs	<input type="checkbox"/> Yes	<input type="checkbox"/> No
d. Other:		

#### Section 4: Other barriers to information use

I would like to know your opinion about how strongly you agree with certain statements. There are no right or wrong answers, only expressions of your opinion on a scale from 1 (strongly disagree) to 5 (strongly agree). You have to determine first whether you agree or disagree with the statement.

Second, decide about the intensity of agreement or disagreement. This information will remain confidential and will not be shared with anyone, except presented as an aggregated data report. Please be frank and choose your answer honestly.

<b>At this facility, decisions are based on</b>	<b>Strongly Disagree</b>	<b>Somewhat Disagree</b>	<b>Neither Agree nor Disagree</b>	<b>Somewhat Agree</b>	<b>Strongly Agree</b>
8. Personal liking	1	2	3	4	5
9. Superiors' directives	1	2	3	4	5
10. Evidence/facts	1	2	3	4	5
11. Political interference	1	2	3	4	5
12. Cost considerations	1	2	3	4	5
<b>In your organization, superiors</b>					
13. Seek feedback from staff	1	2	3	4	5
14. Emphasize data quality in regular reports	1	2	3	4	5
15. Promote a culture of data use	1	2	3	4	5
16. Explain what they expect from staff	1	2	3	4	5
17. Share data with other facilities	1	2	3	4	5
<b>In your organization, staff</b>					
18. Are aware of their responsibilities	1	2	3	4	5
19. Are appropriately trained to use data	1	2	3	4	5
20. Rely on data for planning and monitoring set targets	1	2	3	4	5
<b>Personal</b>					
21. Collecting data makes me feel bored	1	2	3	4	5
22. Collecting data is meaningful to me	1	2	3	4	5
23. Collecting data gives me the feeling that it is needed for monitoring and facility performance	1	2	3	4	5
24. We've discussed a variety of different barriers to data use. Are there any that I have not mentioned that you would like to discuss?					
25. Do you have any suggestions about how to improve information use at your facility?					

## Respondents Log for Version 1 and 2

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 25 individuals. For assistance or clarification, contact MEASURE Evaluation at [measure@unc.edu](mailto: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					
5					

	<b>Title of respondent</b>	<b>Level of government</b>	<b>Type of position</b> (program or policy)	<b>Specialization</b> (PHN, HIV/AIDS, CH/N/M)	<b>Consent Given</b>
6					
7					
8					
9					
10					
11					
12					

	<b>Title of respondent</b>	<b>Level of government</b>	<b>Type of position</b> (program or policy)	<b>Specialization</b> (PHN, HIV/AIDS, CH/N/M)	<b>Consent Given</b>
13					
14					
15					
16					
17					
18					
19					

	<b>Title of respondent</b>	<b>Level of government</b>	<b>Type of position</b> (program or policy)	<b>Specialization</b> (PHN, HIV/AIDS, CH/N/M)	<b>Consent Given</b>
20					
21					
22					
23					
24					
25					

# Planning Matrix for Addressing Barriers to Using Data and in Decision Making

Versions 1 and 2

Barrier No.	Barrier	Proposed Intervention	Steps involved	Person(s) responsible	Other stakeholders	General timeline



## 4 USE

This tool would be used at any time efforts to improve data-informed decision making are considered, 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 and help determine which version of the tool to use.

Version 1: National and Sub-national provides a broad overview of constraints at the national and district levels and can be used in the following situations:

- **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. The PRISM tools may be more appropriate for a national assessment depending on the needs of the users.<sup>1</sup>
- **A new data collection activity is being planned.** The Assessment of Data Use Constraints ensures that the planned research activity will address constraints to data use identified by decision-makers by improving the quality and relevance of information that is produced.
- **Existing population-based data are underutilized.** Ministry of Health officials might wish to see greater use of data resources, such as a Demographic and Health Survey or census data, by policymakers. An Assessment of Data Use Constraints can help identify why data are not being used, and what to do about it.

Version 2: Facility provides a facility-level or organizational assessment of constraints to generating and using data and can be used in the following instances:

- **A health management information system (HMIS) is being examined.** A ministry of health might work with a development partner to assess current practices to collect, analyze and synthesize information, and develop tools to be used by quality improvement teams and coaches to facilitate this knowledge management process, based on best practices and innovating to address current gaps.
- **Existing facility-level information is underutilized.** M&E specialists or other data managers might wish to see greater use of the data resources they have generated. An organizational-level Assessment of Data Use Constraints can help identify why data are not being utilized, and suggested interventions for action.

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<sup>1</sup> Aqil A, Lippeveld T. (2009). PRISM Tools for Assessing, Monitoring, and Evaluating RHIS Performance. Chapel Hill, NC: MEASURE Evaluation.

## 5 AUDIENCE

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

Users of the tool are those interested in overcoming barriers to data use. Program managers and other stakeholders such as consultants and 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 and approaches to address constraints.
- Incorporate key questions from this interview process into other formal and informal assessment methodologies.

## 6 FIELD APPLICATION

Assessment for design of MEASURE Evaluation program activities—Nigeria, September 2005.

A 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.

## 7 EXAMPLE APPLICATION

In an effort to improve data-informed decision making at the state-level in Nigeria, a Local Government Authority (LGA) first began with an assessment of data use constraints. The results of the assessment were used to plan and implement interventions to overcome barriers to data use.

## Sample of a completed interview transcript—Decision-maker perceptions

Version 1: National and Sub-national

Interview logistics	
Date	August 30, 2005
Time Start/End	Start: 11:36 a.m.      End: 12:22 p.m.
Interviewer Name	A. A.
Title of Respondent	Director, Public Health Department
Number of Years in this Position	5 years
Specialization <i>(check all that apply)</i>	<input checked="" type="checkbox"/> Population, Health and Nutrition <input type="checkbox"/> Child Survival <input checked="" type="checkbox"/> HIV/AIDS
Level:	<input checked="" type="checkbox"/> National <input checked="" type="checkbox"/> State <input checked="" type="checkbox"/> Local
Responsibilities <i>(check all that apply)</i>	<input checked="" type="checkbox"/> Policy <input checked="" type="checkbox"/> Program
Sector <i>(check one)</i>	<input type="checkbox"/> Private <input checked="" type="checkbox"/> Public

### About this interview—and why your participation is so important

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.

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.

Are you willing to participate?  Yes       No (stop interview)

### Introductory questions

RA1	What was the last major decision related to policies or programs that you made? <i>The last was the immunization program.</i>
RA2	What information did you use to make this decision? <i>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&amp;E officers at the local governments visited health facilities to collect data which was sent to us and we tried to analyze it.</i>
RA3	How did you use information to make this decision?

Introductory questions	
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 years, 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 immunization, 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 program 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 organization 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 does 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. 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>

<b>Technical constraints</b>	
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>

<b>Individual constraints</b>	
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>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&amp;E officers has to be trained on data management. Many of our M&amp;E officers cannot even use computers. People need to know why we are collecting data and why we must have correct data.</p>

<b>Organizational constraints</b>	
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	How does your organization support the prioritization and use of information in decision making?
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., immunization 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	How does this process affect your ability to use information to make decisions?
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>

Organizational constraints	
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 politicized 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?

## Sample of a completed respondent's log—Decision-maker perceptions

**Assessment:** LGA Assessment of Data Use Constraints

**Country:** Nigeria

**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](mailto:measure@unc.edu).

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

## Sample of a Completed Planning Matrix for Addressing Barriers to Using Data in Decision-Making Assessment of Data Use Constraints

Proposed Intervention	Steps involved	Person(s) responsible	Other stakeholders	General timeline
<p>1</p> <p><b>Barrier:</b> Lack of capacity at the facility level to produce quality and accurate data</p> <p><b>Intervention:</b> To build capacity of relevant key players in collecting, collating, and reporting data</p>	<p>On the job training</p> <p>Continuous mentoring</p>	<ul style="list-style-type: none"> <li>M&amp;E Specialist</li> <li>Training Coordinator</li> <li>M&amp;E Specialist</li> </ul>	<ul style="list-style-type: none"> <li>Chief Medical Director</li> <li>Chief of Party</li> <li>SACAs</li> <li>SACA focal person</li> <li>Program Manager</li> </ul>	Oct-07
<p>2</p> <p><b>Barrier:</b> Lack of coordination of data from the facility level to the IP in a timely manner</p> <p><b>Intervention:</b> To establish a functional data flow mechanism</p>	<p>Identifying focal people for data collection and collation</p> <p>Identify and provide feasible access to collated data</p>	<ul style="list-style-type: none"> <li>Chief Medical Director</li> <li>Project Coordinators/Managers</li> <li>Chief Medical Director</li> <li>Project Coordinators/Managers</li> <li>Facility Staff</li> </ul>	<ul style="list-style-type: none"> <li>Chief of Party</li> <li>M&amp;E Specialist</li> <li>Chief of Party</li> <li>M&amp;E Specialist</li> </ul>	Oct-07
<p>3</p> <p><b>Barrier:</b> Lack of computerized database at IP level to analyze and interpret data</p> <p><b>Intervention:</b> To develop a user-friendly and secure database at the IP level</p>	<p>Allocate resources</p> <p>Training on the use of the software</p>	<ul style="list-style-type: none"> <li>Chief of Party</li> <li>Database Consultants (private Sector)</li> <li>Training Coordinator</li> </ul>	<ul style="list-style-type: none"> <li>M&amp;E Specialist</li> <li>Project Manager</li> <li>Private Sector</li> <li>M&amp;E Specialist</li> <li>Project Manager</li> </ul>	Sep-07



## 8 GUIDELINE FOR SELECTING KEY INFORMANTS

### Version 1: National and Sub-national

**The interview process should include a range of informants**—The guides for key informants and data users focus on decision-maker perceptions about constraints and barriers that hinder their 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. The guide for data producers focuses on health facility staff, such as data managers, who generate data for use by decision-makers.

- A typical assessment process would ideally include interviews with 20 to 25 individuals.
- Up to two-thirds of these individuals 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 the 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.

This assessment focuses on 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.

**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 organizations.

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. If using the tool in a workshop setting, or if following up the interviewees with a dissemination meeting to share assessment findings, participants can develop a plan to address identified barriers and constraints with the matrix (Addressing Barriers to Using Data and Information for Decision Making).

### **Version 2: Facility**

Using the following criteria, the consultant may choose informants on an opportunistic basis and conduct interviews at the health facility to increase informants' ability to participate.

- Determine the clinical area—malaria, HIV/AIDS, family planning, tuberculosis—of interest. If the aim is to assess HIV/AIDS clinics, for example, staff working in this clinical area should be interviewed.
- A typical assessment process should include interviews with at least five individuals from each facility.
- Include staff working in positions with a range of data production and use responsibilities, such as senior managers, clinicians, laboratory and pharmacy staff, counselors, and health information officers. Representation from each group is preferred.
- The list should include health officers and program managers if a group of facilities in a district or program are being assessed.

## **9 ILLUSTRATIVE REPORT OUTLINE VERSIONS 1 AND 2**

Template for Assessment of Data Use Constraints final report

### **Cover page: Report title, date and author**

An Assessment of Data Use Constraints—Decision-maker Perceptions among Key Informants in [Country] or Data Users' and Producers' Perceptions in [Country]  
[Date] [Author]

### **Report content**

- Abbreviations and acronyms used in the report
- Table of contents
- Executive summary
- Background and objectives
  - » Purpose of the study
  - » Methodology
    - Study design
    - Sampling
    - Data collection methods
    - Data analysis methods
    - Limitations and methodological difficulties

- Findings—Presentation of findings. Include quotes to support the findings.
  - » Decision making by respondents
    - Types of decisions (use examples to illustrate types of decisions)
    - Flow of information (facility-level)
    - Constraints experienced by respondents (e.g., timeliness, format)
    - Missed opportunities for using data to make decisions
    - How data is currently meeting needs of respondents
    - Examples of using data to make decisions
    - Data and donors
  - » Technical constraints
    - Technical capacity
    - Quality of data
    - Barriers: specific barriers (RHIS, survey data, research results)
    - Proposed methods to overcome these barriers
  - » Individual constraints
    - Staff and use of data
    - Staff and producing/communicating data
    - Suggestions for overcoming lack of staff use of data
  - » Organizational constraints
    - Leadership, structure, culture, roles/responsibilities, resources
    - Environment, international priorities, economic, political, social
  - » Other areas/findings that do not fit the above categories
- Discussion
  - » Interpretation of the findings
  - » Importance of the results to others thinking about the problem
- Conclusions and recommendations
  - » Implications of findings
  - » Next steps

## 10 IMPLEMENTATION CHECKLIST

### 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, examine a HMIS 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, among health facilities or at the national or sub-national level? What types of informants would be appropriate to include? See Section 8 for Guidelines on selecting key informants and other interview participants.
- ❑ 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 or workshop participants, 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 e-mail 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 an individual to perform the assessment**

The assessment could be performed by a consultant or a member of the organization being assessed. The process tends to be more effective and produce more robust results when conducted by an individual with seniority to be respected by high-ranking key informants. Ideally, the individual conducting the assessment will:

- Have intimate knowledge of the cultural and political environment.
- Know the informants and have 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 partners**

The usefulness of the assessment depends partly on ensuring that the individuals 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. When the assessment is being conducted to inform the design of a national M&E plan or to promote use of national- or programmatic-level data, 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 or attending the workshop, 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.

In cases where the purpose of the assessment is to improve a HMIS at the health facility level, the group of project stakeholders might include program managers from national country government projects, a district-level M&E officer, hospital superintendents, and representation from implementing partners in development organizations.

In this meeting, the group will:

- *Define a preliminary list of health facilities.* Determine the clinical area—malaria, HIV/AIDS, family planning, tuberculosis—of interest. If the aim is to assess HIV/AIDS clinics, for example, staff working in this clinical area should be interviewed; however, senior management and data specialists may have responsibility for more than one clinic unit.
- *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—For interviews with the key informants identified in the previous step, set up appointments and 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.

When using the guide during a workshop to identify barriers and constraints to data use in an organization or program, divide the participants into small groups of 5-6 people and have them complete the questions on the adapted questionnaire. Following this exercise, instruct participants to complete the matrix (Assessing Barriers to Using Data and Information for Decision Making) which should include proposing interventions to address constraints identified in their questionnaires, stakeholders who should be involved in the interventions, and a developing a timeline for addressing these issues. For interviews with health facility staff, plan on 30 minutes for each interview. The consultant may choose informants on an

opportunistic basis and conduct interviews at the health facility to increase informants' ability to participate. It is useful to interview data producers before data users, if possible, to better understand the context in which information is produced and used at the facility.

- ❑ 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 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 needed only 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. When interviewing key informants, 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. When interviewing facility level staff, the interviewer should record answers to closed-ended questions as indicated on the questionnaire.
- ❑ 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. Responses to

the facility-level survey may be recorded in an Excel spreadsheet which allows for ease of analysis. In this case, designate one column for each question and record respondents' answers accordingly.

### **Step 5—Analyze and report the findings**

When you have conducted and documented all the interviews, prepare a report (not to exceed 10 pages) that summarizes the findings and the interviewer's general recommendations.

This report should follow the outline provided in Section 9 of this chapter, incorporating your interpretations and conclusions. If you prefer to create the report by computer—which is both 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 or in an Excel spreadsheet.
- 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.

*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 program 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 program implementation.*



*The study recommended a 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 program 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, 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 using the Planning Matrix for Overcoming Barriers to Data Use.* This information will have immediate applicability, and will contribute to a broader national and international understanding of how to improve data use. Also of benefit is a list of recommendations and actions mapped against the stakeholders needed to implement the interventions and a timeline for implementation.

## **11 CONCLUSION**

Promote 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.

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