Building Leadership

FOR DATA DEMAND AND USE

Building Leadership for Data Demand and Use

A FACILITATOR'S GUIDE

Foreword

The *Building Leadership for Data Demand and Use* program is designed as an organizational process that brings together teams to focus on and develop leadership and management practices, identify and face challenges that inhibit data use, and achieve measurable results in applying data demand and use technical skills in order to make well-informed, evidence-based policy and program decisions.

This approach differs from traditional training programs in that the program does not simply introduce theories in a course/lecture setting, but offers a process for a team to apply what they have learned to achieve results through action learning and applying the learning to their real-life challenges.

This curriculum has been developed as a complete program that will allow facilitators and the faculty of institutions of higher education to deliver the course on an on-going basis to cohorts in the public, not-for-profit, and civil society sectors.

The curriculum also offers suggestions for a follow-on results presentation, if desired.

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Acronyms

AIDS	acquired immune deficiency syndrome
DANIDA	Danish International Development Agency
DHS	demographic health survey
DDU	data demand and use
HIV	human immunodeficiency virus
HMIS	health management information systems
FCSW	female commercial sex worker
M&E	monitoring and evaluation
MEASURE Evaluation	Monitoring and Evaluation to Assess and Use Results
MEVAL-III	MEASURE Evaluation Phase III
MOH	ministry of health
PLACE	Priorities for Local AIDS Control Efforts
USAID	United States Agency for International Development

Section 1   How to Use this Guide

This program is for both experienced and novice facilitators to use and learn from as they implement the workshop. It presents facilitators with the foundations of this workshop, explains how to conduct all the necessary activities, and is designed to be easy to use and adaptable to suit the specific needs of various target audiences.

To that end, this program includes:
- an outline of the course,
- background for facilitators to use in preparing for the workshops,
- facilitator notes for delivering the material,
- handouts for participants,
- additional resources for planning and leading the workshops,
- PowerPoint slides that can be used to support the presentation of materials, and
- additional resources on both leadership and data demand and use (DDU).

This guide presents the learning process in a logical and thorough way. There are detailed instructions on how to proceed through each step. It is also designed with a transformational approach whereby participants learn new principles, practices, and tools that link leadership with increasing demand for and use of data. Participants can then apply these skills and behaviors to improve or enhance services in the health sector.

Section 2   Program Description

This program aims to provide the conceptual basis for leading data use within an organization or program, or at the national, state, or district level of government. It includes a variety of leadership, management, and DDU tools created by MEASURE Evaluation partners to facilitate the sustainable use of data in decision making.

The specific learning objectives of this curriculum are to:
- raise awareness of the importance of data in decision making;
- define the role of leadership in promoting sustainable data use;
- build individual and team capacity to apply DDU concepts, approaches, and tools;
- promote and sustain them through strong leadership; and
- develop and implement specific plans to overcome barriers to data use.

Program Principles

Team approach: Ideally, the program should be delivered to teams from the same organizational or governmental level. The program is designed for people who work together on a regular basis and who are geographically located such that they can meet face-to-face to implement their plans. If the facilitator chooses to use the optional second workshop (Module 2), the teams would meet weekly between the two modules and be coached by a facilitator.

Each team should include both data users and data producers:
- Data users are health professionals, policymakers, and other key health decision makers who use data to inform the design, implementation, monitoring, and improvement of health programs.
- Data producers are professionals who acquire and analyze health data and prepare them for distribution to audiences of users. These include monitoring and evaluation (M&E) specialists, data clerks, or researchers.

For leading and improving the use of data and the demand for it, the team approach has proven effective because it ensures that all of those involved understand their respective roles in DDU, how the roles interact with each other, and how to provide leadership within a team. Capacity for both leadership and DDU is developed through a dynamic, interactive relationship with others.

Understanding that team training may be cost prohibitive, the next best option is to provide separate training for data users and data producers from the same organization. This type of training can be conducted as an add-on to previously scheduled meetings to minimize travel costs. If this option is selected, facilitators should emphasize the links between data users and data producers.

Fundamental Principles of Leadership

The principles on which the leadership aspect of this program is based include the following:

- Leadership can be learned.
- Anyone at any level of an organization can be a leader if he or she uses these leadership practices.
- Leaders are people who facilitate the success of individuals and the entire team in order to achieve results.

When applied consistently, good leading and managing practices strengthen organizational capacity and result in higher-quality services and sustained improvements in DDU which in turn leads to better health (as shown in the program model Figure 2 on page 7).

The changes we see in individuals and their impact on the organization are what we call *leader shifts*.

Table 1   Leader Shifts

Shift perspective from…	to…
individual heroics	collaborative actions
despair and cynicism	hope and possibility
blaming others for problems	taking responsibility for challenges
scatters, disconnected activities	purposeful, interconnected actions
self-absorption	generosity and concern for the common good

Source: Managers who Lead, Management Sciences for Health

Fundamental Principles of DDU

Given a global context of high disease burdens, growing populations, and a greater demand for effective health services, decision makers need now more than ever to consult quality data to make informed choices about policies, programs, and services. Decision makers, whether public or private, are more accountable to their own governments for strategically allocating limited resources as well as answering to the international community of donors who support government plans for development. DDU tools provide a systematic approach to understanding the factors that inhibit or encourage data-informed decision making.

The DDU topics discussed in this program are based on the following principles:

- Data use is more than the reporting and dissemination of data. It involves the regular review, discussion, and interpretation of data during the decision making process.
- Decision making is a process that requires the identification of key stakeholders, their information needs, and the data needed to support their upcoming decisions.

- Data users and data producers must work together in the decision making process. Everyone has a role to play.
- The data-use context must be assessed and barriers to data use overcome through the involvement of both data users and producers.
- Leadership skills and other supports for data use must be developed and maintained to address technical, behavioral, and organizational determinants.

The DDU framework in Figure 1 illustrates the ideal data-use cycle, which looks beyond data collection and availability to also include:
- securing the technical and human capacity to manage and analyze the data,
- ensuring that the information is available and in a format that is easily understood by the relevant stakeholders, and
- fostering the interpretation of the information and its ultimate use to improve policies and programs.

The DDU framework holds the assumption that the more positive experiences a decision maker has in using information to support a decision, the stronger the commitment will be to improve data collection systems and continue to use the information they generate.

Figure 1   **DDU Framework**
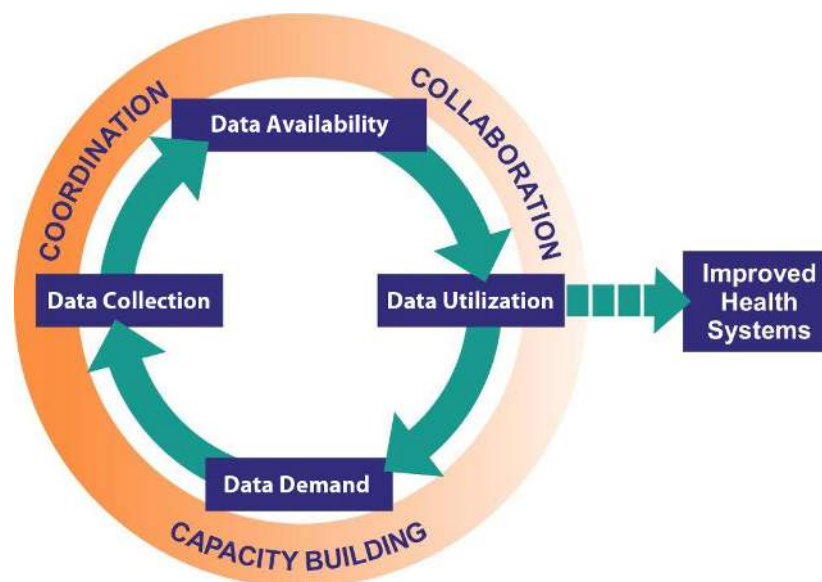
Program Structure

This *Building Leadership for Data Demand and Use* program has been structured to be completed in one module, but if desired, an additional module for results reporting may be added. The first module covers specific leadership and DDU topics and also demonstrates the relationship between the two.

If there is to be a second module, it might occur at any interval after the first module, but most likely it would occur about six weeks after the end of Module 1. It is designed to bring the participants back together to share results, explore ways of communicating these evidence-based results, and look forward to the next data-use challenge. (See full overview of Modules 1 and 2 on pages 11 and 13, respectively.)

The structure is intended to introduce the principles to the teams and then give them the opportunity to apply the principles in a real-life situation. After the teams have successfully implemented their plans, a second module would give them the opportunity to share with the other participants both the successes and challenges faced. (See Program Methodology on page 7.)

Section 3   Workshop Model and Methodology

The workshop methodology is based on the principle that leadership is at the heart of DDU and that DDU tools need to be applied consistently in order to ensure that evidence-based decisions are made over time and result in improved health outcomes. For the model used to express this relationship, see Figure 2.

Figure 2   Leadership for DDU Results Model
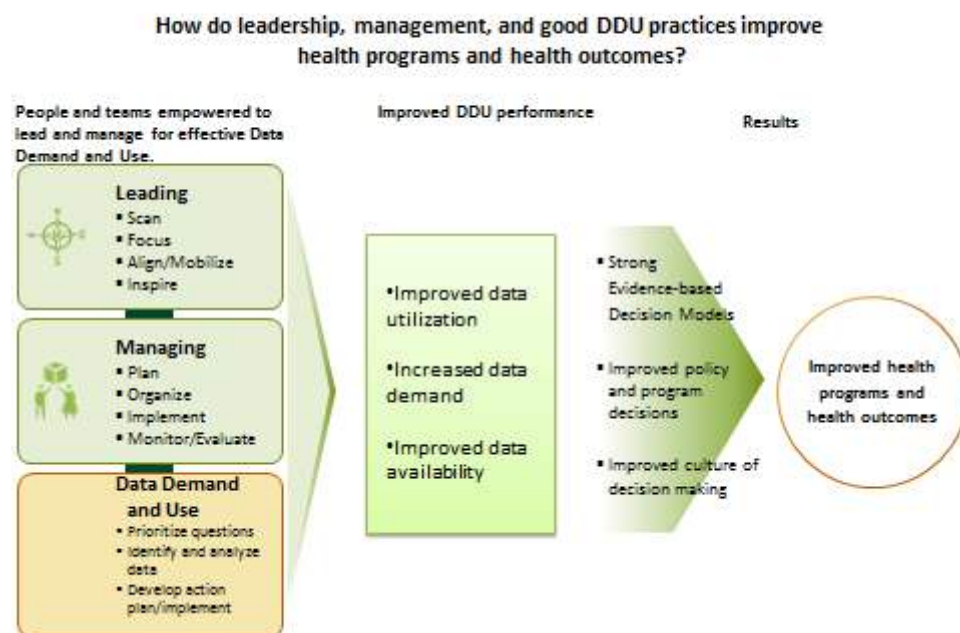
The learning methodology is experiential: the participants learn by doing and then reflecting on their experiences. They learn principles that validate their own experience, apply them to real challenges, and engage in continuous reflection with their teams as well as other participants in the workshop.

This program is designed to be led by two facilitators who both have an understanding of leadership and DDU. However it is likely that one facilitator will have a much stronger background or comfort level in facilitating leadership while the other will be more qualified to facilitate the DDU portion of the program. It is possible that one person can facilitate the workshop if the number of teams and participants is relatively small; however, given the intensity of the individual and group work sessions, most workshops will require more than one facilitator. This is also true for any coaching that takes place following the program or between modules (if a second module is planned).

Although the program is designed for use with teams of senior level directors and managers, it can easily be adapted for different audiences. For example:

- For regional, district, or local teams, the primary adaptations that would need to be made are to increase the length of time from three days to probably five days and to choose appropriate data sources to use as examples for the exercises. The longer timeframe would allow the facilitators to elaborate the material in greater detail and give the participants more opportunity to ask questions and reflect.

  The adaptations for these audiences would include 1) ensuring that there are compatible teams with participants who have similar interests and backgrounds and 2) allocating enough time for the teams to complete their action plans given other course requirements. The reason for having the teams be as homogeneous as possible is so that the action plan can be usable beyond the scope of the workshop. In other words, it is not a made up assignment, but rather something that will forward their work.

- Combined with other course material, this program can be included as part of a larger M&E program to provide a full introduction to M&E and leadership. The additional resources provided allow for the facilitators to provide and expand greater technical content in DDU and leadership as desired.

The program is designed to reflect an anticipated cohort of no more than 25–30 participants with each team consisting of 4–6 participants.

Section 4   Getting Started

Step 1: Identify your target audience. As you review the materials, knowing your target audience will help you to modify the content and timeline to meet the learning needs and styles of the participants.

Step 2: Familiarize yourself with the materials, including the model and content of the course as well as the Facilitator's Guide and the flash drive. Prior to the workshop, the facilitators should be completely familiar with the process and the specific aspects of each session.

Step 3: Plan out the workshops in advance with consideration to content, additional resources required, and timing of the sessions. Determine who will facilitate each session and if some sessions could be jointly facilitated depending on the preferences of the facilitators.

Step 4: Set up the logistics. The facilitators or their administrative staffs need to ensure that all of the required materials, photocopies, supplies, and equipment are available and that the venue is appropriate for the workshop. The room should be large enough to allow participants to sit at tables with their team members and to move about in the room. The ideal layout for the room is displayed in Figure 3.

Figure 3   Room Layout for Learning Modules

Round tables for 4–6 people each (team tables)

Facilitator and screen
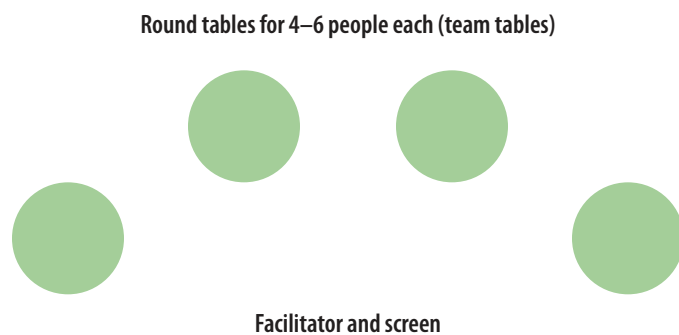
Other logistical arrangements (enrollment, food, transportation, invitations, etc., if required) should be taken care of well in advance.

Step 5: Practice the material and delivery to ensure that you can facilitate the content and activities smoothly.

Section 5   Module 1 Overview

Purpose

- Demonstrate the connection between leadership and DDU
- Provide theory and practice in both leadership and DDU
- Support the participants in preparing action plans
- Prepare the participants for implementing their plans

Sessions

Module 1 includes seven sessions:
- Welcome and Introductions
- Session 1: The Case for Leadership and Data Demand and Use
- Session 2: Your Role as a Leader in Promoting Data Use
- Session 3: Context of Decision Making
- Session 4: Linking Data with Action
- Session 5: Identifying Opportunities and Barriers for Improving Data Use
- Session 6: Culture Change and Change Management

Schedule

MODULE 1	DAY ONE	DAY TWO	DAY THREE
Morning	• Welcome and Introductions • Session 1 • Session 2	• Session 4 • Small Group Exercise	• Session 5
Lunch Break			
Afternoon	• Session 2 continued • Session 3 • Closing Reflections	• Session 4 continued • Data Discrepancies • Small Group Exercise • Closing Reflections	• Session 6 • Coming to a Close

Preparations: Guest Speaker(s)

If you think it is appropriate, ask an organizational sponsor and/or local authority to do a brief introduction to the module. Their words will stress the importance of the program and encourage the participants to learn how to lead and manage for improved DDU.

Preparations: Materials

- You will need to give each participant a plastic briefcase, folder, or three-ring binder in which to store workshop handouts and resources.
- Copy the handouts ahead of time. At the start of each session, a summary includes a list of everything you need to prepare. An activity plan will explain what materials you need for each specific activity.

- You will need a variety of materials—such as flipcharts, paper, and pencils—for each session. These materials are also listed with each session and each activity. Sometimes you will need to prepare flipcharts ahead of time.
- It is recommended to make slides available on a flash drive where it is appropriate. It may be more appropriate, for example, when the audience is large and not everyone can see the flipcharts. Flipcharts may be more appropriate when conditions do not allow for the use of projector, screen, etc. It also depends on the preferred style of the facilitator.

Reflections

There is time for individual and team reflection during each of the sessions and at the end of every day so participants can talk about what they learned and what seemed most important to them.

NOTE: Regular reflection is an important leadership practice. It enables people to have time to think about what they have learned and how to apply it.

Section 6   Optional Module 2 Overview

Should the facilitator, the partner, and the donor agree that there should be a reults presentation at the end of a certain period of time after Module 1, this section provides a guide to how the results presentation might be structured.

Purpose

- Provide content and structure for results reporting
- Allow the teams to report back on the successes they achieved and the challenges they encountered in implementing team projects
- Provide a forum for discussing common challenges encountered and ways to address them
- Support the teams in sustaining their leadership in DDU

Sessions

Module 2 includes three sessions:
- Session 1: Results Presentations
- Session 2: Reinforcing Culture Change for Leadership and Data Use
- Session 3: Next Steps

Schedule

MODULE 2	DAY ONE
Morning	• Welcome • Session 1
Lunch Break	
Afternoon	• Session 2 • Communicate outcomes • Session 3 • Closing

Preparations: Guest Speaker(s)

Ask the same organizational sponsor and/or local authority who welcomed the participants in Module 1 to return to hear the results of the teams and to speak briefly about what he/she hears. The sponsor should inspire the teams to continue to apply their new knowledge, skills, and tools learned in the workshop in everyday practice.

Preparations: Results Presentation and Other Stakeholders

To make the results presentation more of an event and to showcase the program's results, invite other stakeholders to attend this event, possibly with a simple reception following. Typical stakeholders might include senior officials from the organization from which the cohort is drawn as well as senior managers from the facilitator's own organization and donor organizations such as USAID. Invitations should be issued

well in advance along with the agenda. Another benefit of making this an important event is that it will reinforce the importance of the participants implementing their plans. A presentation for other stakeholders and senior staff will motivate teams to achieve action plans proposed during the workshop and showcase their commitment to using data to improve health services.

Preparations: Materials

You will need to provide each attendee with a pad of paper and a pen for taking notes. You will need a variety of materials, such as flipcharts, paper, and pencils, for each session. These materials are also listed with each session and each activity. Sometimes you will need to prepare flipcharts ahead of time.

Evaluations

Module Evaluations: Immediately following each module ask participants to evaluate the technical content, course materials, training methodology, and if the learning objectives were met. To evaluate each module, copy and hand out the brief evaluation form found in this manual as a handout (Appendix 1). Ensure that sufficient time is allocated for participants to complete the evaluation forms.

Program Evaluations: At approximately six and twelve months after the initial workshop, it is recommended that participants be contacted to participate in in-depth interviews to retrospectively assess outcomes (Appendix 2). The success of this program is measured in four ways:
1. Individual changes in data use and leadership practices.
2. Improvements to existing organizational supports that facilitate data use.
3. Development of new organizational supports that facilitate data use.
4. Progress of teams in implementing their DDU action plans.

Between Modules 1 and 2 or Between Facilitator Coaching and Check-Ins

Team meetings: Participants will work together to implement their action plans and ensure progress on the DDU-defined activities. At these meetings, which could take place at any interval or possibly once a week over the six weeks between Module 1 and Module 2, the team members should also share their leadership experiences—what leadership and management practices they have tried and what the results have been? At the end of each meeting, the team members should leave with clear next steps related to their action plans and practicing leadership behaviors.

Coaching sessions: If desired, the facilitator(s) can meet either face-to-face or virtually (telephone, Skype, or email) with one or more representatives from each team on a weekly basis to help the teams assess their progress in overcoming obstacles to the implementation of their plans and review their use of the tools. Ideally these meetings would be held face-to-face, but if that is not possible, they can take place by telephone or Skype. Email is not recommended because it is less likely that the participants will be engaged in this manner. Records of the coaching sessions will be kept in the coaching log and post-visit coaching report (Appendix 3).

Sessions   Welcome and Introductions

SESSION OVERVIEW	
Duration	1 hours, 30 minutes
Purpose	- Welcome and introduce participants - Introduce the purposes and objectives of the program - Review expectations and certificate requirements - Review agenda
Learning Objectives	By the end of this session the participants will know: - Who their fellow participants and the facilitators are - The broad overview of the program and the daily agenda - The purposes and objectives of the program - The expectations and certificate requirements
Preparations	- Customize the overview, timeline, and agenda, as needed - Read the facilitator notes for this session (you might want to add your own notes to further guide you and reflect the needs of different audiences) - Invite a senior manager or a program sponsor from the MOH, University, or project to make a brief (5–10 minute) welcome speech - Prepare copies of all handouts - Prepare the required flipcharts (questions for introduction interviews, program learning objectives, day's agenda, and session times)
Materials	- Flipchart—easel and paper - Tape
Handouts	- Program Overview and Timeline - Sample Module 1 Agenda - Leadership for Data Demand and Use Model
Note to Facilitator	A script is also found on the notes pages of the Power Point slides

START—Welcome and Introductions

Go to   **Slide 1: Introductory slide**

ACTIVITY 1   **WELCOME AND PARTICIPANT INTRODUCTIONS**

Purpose

After the initial welcome by the invited guest, this exercise sets the tone for the program by welcoming the participants and giving them an opportunity to get to know each other. It is designed also to start creating bonds between the participants.

Duration

30 minutes

Process

Go to   **Slide 2: Participant Interviews**

Step 1: Participants interview each other

❑ Prior to the beginning of the day, you can write the questions on a flipchart or use the slide.

> **SAY:** Please find the person in the room whom you know least and interview him/her for a couple of minutes asking the following questions:
> - What is your name?
> - What is your title?
> - What is one thing that no one in the room knows about you? (It could be a hobby, a skill, a language you speak, etc.)
>
> Once the first person has answered the questions, switch, and you will have another two minutes for that interview.

Step 2: Ask the interviewers to introduce their partners

❑ The facilitators model the presentations by introducing each other and going around the room until everyone has been introduced. This exercise needs to move quickly so keep an eye on the time and be clear about the time with the participants.

Go to   **Slide 3: Learning Objectives**

| **ACTIVITY 2** | **REVIEW BUILDING LEADERSHIP FOR DDU COURSE LEARNING OBJECTIVES** |

Duration

10 minutes

Process

Prior to the beginning of the day, you will want to write these objectives on the flip-chart or use the slides on the flash drive:

- Raise awareness of the importance of data in decision making.
- Define the role of leadership in promoting sustainable data use.
- Build individual and team capacity to apply DDU concepts, approaches, and tools. Promote and sustain them through strong leadership.
- Develop and implement specific plans to overcome barriers to data use.
- Check for understanding and questions.

Go to   **Slide 4: Agenda**

ACTIVITY 3   **REVIEW AGENDAS**

Duration

10 minutes

Process

Step 1: Hand out *Program Overview and Timeline*

Step 2: Hand out *Sample Module 1 Agenda*

❑ Review any pertinent logistical issues (where the restrooms are, where lunch will be served, etc.)

❑ Check for understanding and questions

Go to   **Slide 5: Building Leadership for Data Demand and Use Model**

ACTIVITY 4   **EXPECTATIONS AND NORMS**

Duration

30 minutes

Process

Step 1: Review expectations

❑ Explain the program methodology which is based on the principle that leadership is at the heart of DDU and that DDU tools and approaches need to be applied consistently in order to ensure that evidence-based decisions are made over time.

❑ Hand out *Leadership for Data Demand and Use Model* and explain.

❑ Explain that the learning methodology is experiential and is based on the theory that people learn best when they apply what they have learned and then reflect on what they have learned.

Go to   **Slide 6: Expectations**

Step 2: Expectations exercise

SAY: Consider your expectations of this program.

ASK: If this program were extremely valuable to you in the sense of improving your leadership capacity as well as your understanding and ability to use data demand and use tools, what would you take away from it?

SAY: Take a minute or two to think about this.

❑ Ask participants to state their expectations and ask the co-facilitator to record the ideas on a flipchart.

❑ Offer comments on the expectations by telling them what is within the scope of the program and what is not. Some of the comments will require changes in their organizations, procedures, and training.

Go to   **Slide 7: Ground Rules & Norms**

Step 3: Establish ground rules/norms

SAY: Think of a time when you were in a group where conversation was difficult and it was hard to express your point of view freely.

ASK: What happened? What stopped you from expressing yourself freely?

SAY: Take a moment or two to think about this.

ASK: What did you think of? Give me some examples of what stopped you from speaking out in a large group.

❑ Take responses from a majority of the participants.

> **ASK:** What can we ask of each other in terms of behavior to make this an effective workshop?

❑ Take responses from the group.
  » Continue until there are no more new ideas.
  » Ask your co-facilitator to write the responses on a flipchart.
  » Add your own requests to the participants' list.

❑ Confirm agreement on the ground rules and post the list on the wall. Be sure that the ground rules are posted throughout all sessions and modules.

> **ASK:** What will you do when ground rules are broken?

Often the group will think of consequences such as a small fine, a song/dance/joke, candy for the group, etc., that they will impose.

NOTE TO FACILITATOR: Make sure the facilitators do not take on the responsibility of enforcing the ground rules. Remind the group that adherence to the ground rules is everyone's responsibility because everyone agreed to them.

Go to   **Slide 8: Certificate Requirements**

ACTIVITY 5   **CERTIFICATE REQUIREMENTS**

Duration
10 minutes (including answering questions)

Process
• Attend all sessions of the program (if Module 2 is added, this would include the sessions in Module 2).
• Participate in workshop activities.
• Contribute to teamwork writing, implementing an action plan, and reporting results. Also, take responsibility to ensure that all necessary steps are taken in the implementation of the plan.
• Be prepared and respond to the facilitators when they provide technical assistance and coaching.
• Before ending this session, ask for comments or questions to ensure that the participants are clear about the program, its intent and structure, and the requirements for receiving the certificates.

END—Welcome and Introductions

Session 1   The Case for Leadership and DDU

SESSION OVERVIEW	
Duration	30 minutes
Purpose	• Ensure that all participants have the same understanding of terms used so everyone starts in the same place • Present the rationale for leadership and DDU
Learning Objective	Participants will learn the meanings of commonly used terms and understand why this program is important and applicable to what they do
Preparations	• Pre-determine teams in consultation with senior managers and others. • Read the facilitator notes for this session (you might want to add your own notes to guide you further) • Prepare flipcharts with learning objectives and definitions • Prepare tent cards and place them on the appropriate team tables
Materials	• Flipchart—easel and paper • Tape
Note to Facilitator	A script is also found on the notes pages of the Power Point slides

START—Session 1

Go to   **Slide 1: Introductory slide**

> **SAY:** In this session, we are going to discuss the importance of using data to inform decision making and why leadership is important to facilitate this improvement. We will also review key leadership and data demand and use definitions to create a common understanding of course topics.

Go to   **Slide 2: Session 1: Learning Objectives**

> **SAY:** By the end of this session, you will know the definition of and rationale for:
> - data demand and use and why we're focusing on it;
> - leadership and why it matters;
> - why we're linking these the two topics;
> - why we're talking about it at this specific time; and
> - what is culture change, why is it relevant, and what does it take.

Go to   **Slide 3: Why Improve Data Demand & Use?**

> **SAY:** There is a pressing need to develop health policies, strategies, and interventions. The need for quality health care services is intimately known by all of us. Some of the biggest issues facing us are:
> - A global HIV epidemic. There were an estimated 33 million people living with HIV at the close of 2008, the majority of whom either need or will soon need treatment.
> - Approximately, one-third of the world's population is infected with TB.
> - Each year, malaria causes nearly one million deaths, mostly among children under five years of age the health system is burdened by millions of clinical cases as well.
> - In much of sub-Saharan Africa, the transition from high to low fertility has stalled. Also, young people—those below the age of 20—account for the largest proportion of the population. In the next few years, we will see larger numbers of people needing health services as this cohort ages.
>
> In the face of this demand we are experiencing inadequate numbers and poor distribution of qualified health workers and an inadequate human resources system to support them.

> **SAY:** It is within this context of a high disease burden, a growing population, and insufficient health services, that it becomes extremely important for governments to make the best use of their limited resources. The need to develop strategies, policies, and interventions that are based on quality data and information is urgent.

Go to   **Slide 4: Quote**

> **SAY:** The importance of data-informed decision making is expressed on this slide by a national-level policymaker in Nigeria who participated in a data-use assessment conducted by MEASURE Evaluation. The assessment involved interviews with a range of professionals at the national, regional, and facility levels.

❑ **Engage participants:** Ask a participant to read the policymaker's statement. Briefly discuss with the participants whether they agree or disagree with the statement and why. The goal of this brief discussion is to get the participants thinking about the importance of data use.

❑ **Participant will read the quote:** "… without information, things are done arbitrarily and one becomes unsure of whether a policy or program will fail or succeed. If we allow our policies to be guided by empirical facts and data, there will be a noticeable change in the impact of what we do."

> **SAY:** This statement summarizes nicely why we are here today to discuss the importance of improving data-informed decision making.

Go to   **Slide 5: Why Improve Data Demand & Use?**

> **SAY:** The good news is that as we face a great need to deliver health services, we also have seen increased financial commitments by the international community and local governments to provide the necessary programs and services to meet the critical health needs of target populations—although this is largely for HIV services.
>
> The increased influx of funds and resulting expansion in programs has led to increased accountability requirements by donors, governments, and civil society. As we know, many donors are not only requiring regular reporting on services delivered, but funding for continuation of activities is frequently based on performance

> **SAY:** These accountability requirements have led to strengthened program-matic M&E systems, a commitment for integrated health management information systems (HMIS), and a demand for other types of quality data.
>
> However, these commitments and improvement do not always lead to data-informed decision making.

Go to   **Slide 6: Why Improve Data Demand & Use?**

> **SAY:** In today's environment many health professionals have become over-whelmed with collecting and using data related to services they deliver or that are delivered in their countries. In some contexts, data requirements from government and donors have grown exponentially, to the point where some providers and implementing partners have pages and pages of forms to fill in daily.
>
> Rarely is data sufficiently used to monitor programs and make decisions beyond individual patient care. This is a huge lost opportunity because data are critical to the program improvement and decision making process.

Go to   **Slide 7: Definitions—Data Use**

> **SAY:** Now, let's take a minute to discuss exactly what we mean by using data to inform program and policy decision making.

❑ **Engage participants:** Ask participants what they think are some general ways in which data can be used. After a brief discussion, click on the slide to reveal these examples of ways that data can be used.

> **SAY:** Those are some great ideas about how data can be used. Some uses for data that we came up with are to:
> - create or revise a program or strategic plan,
> - develop or revise a policy,
> - advocate for a policy or program,
> - allocate resources, and
> - monitor a program.
>
> A common data-use approach among each of these tasks is that each review of data is linked to a specific decision making process.

> **SAY:** Using data to populate a report to send to the national level or to a donor is not data use. That is data reporting. The presentation of data at a technical conference also is not data use as we define it. That is data dissemination.
>
> Both data reporting and data dissemination are important precursors to data use—but they are not linked specifically to decision making processes.

Go to   **Slide 8: Definitions—Data Demand**

> **SAY:** Data demand starts with a question or problem that a stakeholder has about a type of health service or a particular health problem. To address this question or make a decision, stakeholders need to educate themselves about the available data or a summary of data sources in order to develop an informed solution. Therefore data demand comes from decision makers who specify what kinds of information they need to inform the decision making process and how to seek it out.
>
> If the information they need to inform a decision doesn't exist or is not available they take steps to get it.

Go to   **Slide 9: Definitions—Data Users & Producers**

> **SAY:** Demanding data and using it in the decision making process involves many different people. In this workshop we will be referring to data users and data producers. When we refer to data users—these are the individuals that use data to inform the design, implementation, monitoring, and improvement of health programs. Data users can include:
> - program managers,
> - program directors,
> - policymakers,
> - providers, and
> - civil society.
>
> We refer to data producers as the individuals that acquire and analyze health data, and prepare it for distribution to audiences of users. Data producers can include:
> - M&E specialists,
> - data clerks, and
> - researchers.

> **SAY:** It is important to note that these definitions are not mutually exclusive. Sometimes one person can be both a data user AND a data producer, it depends on specific contexts and the task at hand. For example, program managers may be involved in the analysis and interpretation of data however, generally speaking an individual usually relates to one definition more than the other.

Go to   Slide 10: Definition—Leadership

> **SAY:** Leadership is a set of learned behaviors that allows a person at any level in an organization to contribute to organizational results and facilitate the success and positive results of those around him or her (the team).
>
> Historically, the word leadership has been applied to people who have a senior level position or are technically experts. To be a leader, then, you needed to be either a boss and/or an expert in your field, in this case a DDU/M&E expert.
>
> More recently the word leadership has been understood to be essential to the interaction between people and the dynamic between and among them. In other words, leadership is now seen to be composed of behaviors and values combined with technical competency.
>
> This definition incorporates the leadership principles used in this program:
> - Leadership can be learned.
> - Leadership can be exercised at all levels.
> - Leaders focus on results.
> - Leaders facilitate the success of others.

Go to   Slide 11: Leadership & DDU Linkage

> **SAY:** As you will see in this program, we stress both aspects—leadership in a dynamic, interpersonal sense and DDU technical competency for four key reasons:
>
> 1. Leadership happens in teams, and DDU is a team effort that requires an interdependent relationship between people working toward a common goal.
>
> 2. Good leaders are required in the DDU process to visualize and strategize and to bring the various actors together (data producers and data users) to achieve results.

SAY: Organizations around the world have increasingly recognized that a single technician working alone, even if he or she is put in charge of a group or team of people, will not achieve optimal results. It takes leaders at all levels who acknowledge and use the strengths of other team members to the greatest benefit.

3. Leadership is the key to implementing an effective DDU strategy. In order to implement an effective DDU strategy, leaders are required to work directly with their teams to help them scan their environment to be able to identify important trends and set priorities, focus on data needs and overcoming obstacles, create an action plan to link data to action, and align and mobilize stakeholders and resources, and inspire their teams to ensure the success of their action plan.

4. Combining good leadership with effective DDU practices creates an effective team-based process that multiplies both the impact and sustainability data-informed decision making.

SAY: In this program we will be examining and implementing the DDU process, developing questions, identifying obstacles and their root causes, and creating and implementing action plans to overcome the challenges to achieve the DDU result you seek.

This means that you will be making changes. This means that you will be learning processes for making changes to the culture of information use in your organizations.

You will see that as you begin to implement new DDU techniques and processes and as you apply new ways of leading it will take a while for the organization to adjust.

This shift in culture will not come easily or automatically. It will take persistent use of the tools and practices you learn here as well as a clear plan for avoiding the pitfalls encountered in every change process.

Who will lead this culture change? You will! And as your team members have the opportunity to be trained they will join you in this dynamic process.

> **SAY:** The visual diagram presented here illustrates the entire cycle of data-informed decision making. This approach illustrates the ideal. You will note that in addition to data collection and therefore availability, there are also the considerations of:
> - securing the technical and human capacity to manage and analyze the data,
> - coordinating to ensure that the information is available and in a format that is easily understood by all relevant stakeholders, and
> - fostering the interpretation of the information and its ultimate use to improve policies and programs
>
> The cycle supports the assumption that the more positive experiences a decision maker has in using information to support a decision, the stronger the commitment will be to improving data collection systems and continuing to use the information they generate.
>
> **ASK:** This raises the question—is this what we are experiencing in our own work environments?

❑ Allow time for a brief open discussion and summarize the points made by the group.

> **SAY:** This data-informed decision making process relies on multiple inputs, activities and systems to function effectively. Even in the best designed M&E systems you often find that data is not being used as often as it should be. So there must be other more fundamental elements within the decision making context that may affect this process.

END—Session 1

Session 2   Your Role as Leaders in Promoting Data Use

SESSION OVERVIEW	
Duration	3 hours
Purpose	• Introduce the Leading and Managing Framework and the Results Model • Create a shared vision around the use of data
Learning Objectives	• Present specific leadership and management practices and tools the participants can use • Demonstrate the importance of being a leader in managing and using data • Develop shared visions and explore the importance of these visions
Preparations	• Read through the facilitator notes for this session • Prepare copies of all handouts • Prepare the required flipcharts
Materials	• Flipcharts—easel and paper • Markers (enough for each team to have 3 or 4 colors) • Handouts • Tape • Letter paper (for each participant)
Handouts	• Leading & Managing Framework • Integrated Leading & Managing Process • Leadership for Data Demand and Use Model • Leader Shifts
Note to Facilitator	Note that the session is divided into two parts: • Who are leaders and what do they do? How do they achieve results? • Developing a shared vision A script is also found on the notes pages of the power point slides

START — Part 1: Leadership Practices and Behaviors

Duration

1 hour, 30 minutes

Objectives

Referring to the prepared flipchart or slide, present session objectives:

- Present specific leadership and management practices and tools the participants can use.
- Demonstrate the importance of being a leader in managing and using data
- Develop shared visions and explore the importance of these visions

ACTIVITY 1   WHO ARE LEADERS AND WHAT DO THEY DO?

Purpose

Demonstrate that leaders can be found at any level in an organization or society. They don't need to have a title, power, authority or status. This exercise enables participants to use their own experience of leading and managing to understand the Leading & Managing Framework.

Duration

30 minutes

Materials

- Flipcharts and easels
- Prepared flipchart (covered) with the definition: "Managers who lead enable others to face and overcome challenges to achieve results."
- Enlarged copy of the *Leading & Managing Framework* handout posted on a wall

Step 1: Introduce leading and managing (15 minutes)

> **SAY:** We are going to explore what it means to lead and manage.
>
> **ASK:** When you hear the word *leader*, whom do you think of? What name pops into your mind?

❑ Take responses from some participants.

TIP: Ask *whom,* not *what,* they think of. Repeat the instructions if participants start to give you definitions of leadership. You want the participants to give you the name of a person.

> **ASK:** What do you notice about the people you have mentioned? When we hear the word *leader*, do we think of individuals in positions of great authority who influence many people? People who are well-known? Do we think of people who have special charismatic qualities who are able to persuade and influence people through their personalities?

Go to   **Slide 4: Who else is a leader?**

> **ASK:** Now if I ask you to name someone in your personal life who is a good leader, someone you know or have known personally, what name pops into your mind? It could be someone in your family (mother, brother, father, aunt, uncle, etc.), a friend, a neighbor, someone in your faith community, etc.

❑ Model the exercise with someone who is at a modest level—a driver, clerk, a child, a teacher.

TIP: Remember that you want the participants to give you a name not a category of people like—soldiers, priests, etc.

> **SAY:** Note that the people you have listed are not necessarily in positions of power or well-known beyond your circle. They are not known to the outside world as great people of stature. That doesn't mean that they aren't good or even excellent leaders.
>
> This exercise illustrates our belief that leaders are found at all levels of organizations and society.

Go to   **Slide 5: What do leaders DO?**

> **SAY:** Take a moment to reflect on what the person you have known does or did that makes you think of him or her as a leader.

TIP: Stress with the participants that you want them to give you an action or behavior that demonstrates leadership. Participants will often give you values (honest, brave, etc.). You can tie this in with inspiring, but you really want to know what actions they take or took on a consistent basis that demonstrates leadership.

❑ Tell the participants to work on their own (individually) for moment and ensure that they have a particular person in mind. Tell them to write down two or three actions or behaviors. After about two minutes, debrief the group by asking them to share their responses. Write them down on a flipchart. Keep taking responses until you are getting duplicates. At the end of Activity 2, you will come back to these and note how the practices align with the actions they identified.

ACTIVITY 2 UNDERSTANDING LEADING AND MANAGING PRACTICES

Purpose
Participants will gain an understanding that leading and managing practices are carried out at all levels in an organization and learn how to apply them in their context.

Duration
60 minutes

Process

Go to **Slide 6: Managers who Lead**

Step 1: Explain the practices (20 minutes)

❑ Show the participants of the definition of managers who lead by displaying the definition you wrote earlier on the flipchart: "Managers who lead enable others to face and overcome challenges to achieve results."

> **SAY:** Let's see how they do it.

❑ Hand out *Leadership & Managing Framework*

Go to **Slide 7: Leadership and Managing Practices**

❑ Refer to the handout of the *Leading & Managing Framework* or a wall poster.

> **SAY:** Through research with many organizations and individuals we have identified four leading practices. They are scanning, focusing, aligning and mobilizing, and inspiring. Let's look at each one.

❑ Ask individual participants to read the definitions on the *Leading & Managing Framework*. Make sure that they read not only the examples, but also the impact on the organization.

❑ Summarize after each person reads a leadership practice with the following statements in order to put the practices into a DDU perspective.

> **SAY:** Here are some examples of how this this practice might be used in the area of DDU:
> - Scanning—identifying internal and external conditions that influence, positively or negatively, the current availability and use of data.
> - Focusing—identifying priority questions and the data needs for answering the question.
> - Aligning and mobilizing—bringing data users and data producers together to review and use data. Also, uniting and motivating internal and external stakeholders to commit resources to support the use of data in decision-making.
> - Inspiring—creating enthusiasm for and a climate of commitment and continuous improvement of data and its use in the decision making process.
>
> In addition to the leading practices, there are four managing practices. They are planning, organizing, implementing, and monitoring and evaluating. Now let's look at each of the managing practices.

❑ Ask individual participants to read the definitions for the managing practices on the *Leading & Managing Framework*. Make sure that they read not only the examples but also the impact on the organization.

❑ Summarize after each person reads a management practice with the statements below in order to put the practices into a DDU perspective.

> **SAY:** Here are some examples of how this this practice might be used in the area of DDU
> - Planning—preparing a set of activities, timeline, and accountabilities to meet data-use goals—developing an action plan to answer the questions you have identified.
> - Organizing—developing structures, systems, and processes to support your plan of action
> - Implementing—carrying out and adapting the plan of action while coordinating related activities
> - Monitoring and evaluating—observing, examining, and assessing progress in the use of information in decision making.

Go to   **Slide 8: Integrated Leading and Managing Process**

Step 2: Hand out *Integrated Leading & Managing Process* (10 minutes)

❑ Demonstrate how leading and managing are two sides of the same coin.

❑ Hold up a coin.

> **SAY:** A coin has two sides and, if there were no image on one side of it, that coin would be valueless. With images on both sides, the coin has value. That's the way it is with leadership practices and management practices.
>
> And we don't expect that everyone will be strong in every practice. One person may be especially strong in scanning and planning, and another person might be especially strong in focusing and implementing. By assessing your own use of the practices, you can further improve your strengths and can learn to use the others. By each team member understanding the other team members' use of the practices, the team will know how each person contributes and who to call on when a particular strength is needed to move the team toward success.
>
> **ASK:** Now that you are familiar with the leadership practices and management practices, which one do you think you will use the most and represent your greatest strength personally?

❑ Call through the practices and record number of people who indicate which practices are their strengths.

> **ASK:** What does this result suggest to you as a group? Where is your group strongest and where might you need to develop more strength?

❑ Call on people for responses.

> **SAY:** Leaders draw on personal strengths and the strengths of others to ensure that the integrated leadership and management dynamic exists and leads to results.

❑ Validate the practices by going back to the list of actions they identified earlier as the behaviors of the leaders they know/knew and show how they are related.

Go to   **Slide 9: Team Activity—Applying the Practices**

Step 3: Team work (30 minutes)

❑ Assign each team/table one or two practices (depending on the number of tables/teams) to discuss the following question

> **SAY:** If you were using this practice (these practices) in your organization, what specifically would you be doing? In other words, how would you be putting the leadership and management practices to work to improve DDU?

❑ Give the teams about 15 minutes to discuss.

❑ Ask the teams to report out one or two ways they can use each of their assigned practices for leading and managing the use of data. Clarify them, if necessary, and engage the group in deciding whether or not these activities fit the practice to ensure that the team understands the practice they are presenting. Depending on the number of teams, this may take 10 to 15 minutes.

NOTE TO FACILITATOR: By asking people in small groups to reflect on each individual practice, you help them relate it to their own experiences and make it their own.

ACTIVITY 3   **LINKING LEADERSHIP AND MANAGEMENT TO DDU RESULTS**

Purpose
This exercise reminds the participants of the *Leadership for Data Demand and Use Model* to reinforce the link between managers' practices and their results in DDU and ultimately improved health outcomes.

Duration
10 minutes

Materials
- Enlarged copy of the *Leadership for Data Demand and Use Model* posted on a wall
- Prepare flipcharts with the belief that the core of developing leadership capacity is: "The proof of good leadership lies in achieving measurable improvements in DDU which ultimately, in turn, leads to improvements in health outcomes."—Paul Wong
- Handout: *Leadership for Data Demand and Use Model*

Process

Go to   **Slide 10: Building Leadership for DDU Model**

Step 1: Reference the *Leadership for Data Demand and Use Model* (10 minutes)

❑ In the large group, turn to prepared flipchart or slide.

> **SAY:** At the core of developing a health system manager's leadership capacity is this belief: the proof of good leadership lies in achieving measurable improvements in DDU which ultimately leads to improvements in health outcomes.
>
> This program focuses on improving health outcomes through better delivery of health services that rely for improvement on evidence-based decisions.

❑ Hand out *Leadership for Data Demand and Use Model.*

❑ Refer to the handout, a poster on the wall, or the slide.

> **SAY:** Managers who learn to apply the eight leading and managing practices listed on the left of the model result in:
> - improved data use,
> - increased data demand, and
> - improved data availability.
>
> When applied consistently, good leading and managing practices strengthen organizational capacity to use data for evidence-based program and policy decision making which lead ultimately to sustained improvements in health outcomes.

❑ Before going on to the second part of this session, ask for comments or questions to ensure that the participants are clear about the leadership and management practices. Even after this presentation and the exercises, it is often difficult for the participants to distinguish between titles/position and use of the practices. Be prepared to make the distinction.

Managers who lead can be found at all levels of the organization if they use the practices consistently. This means that they can be leaders WITHIN their realm of responsibility. For example, a janitor can be a leader in doing his job because he enables others to face challenges and achieve results by:
- scanning the environment to see what needs to be done;
- focusing on identifying the priorities and addressing them one by one;
- aligning and mobilizing others to support his cleaning goals by not throwing things on the ground or helping to pick up trash around the building; and
- inspiring others by his hard and work and excellent results, cheerful attitude, and friendly greeting.

END—Part 1

START—Part 2: Developing a Shared Vision

Duration

1 hour, 30 minutes

Purpose

- Introduce participants to the concepts of mission and vision
- Explore how to create and articulate a shared vision

Preparations

- Place a sheet of blank paper in front of each person before commencing this second part of Session 2
- Prepared flipcharts (preferably side by side) with examples of vision statements and mission statements

Examples of Mission Statements

- **Personal:** My mission is to provide detailed technical M&E training and guidance to the people in my department so they can excel in their work.
- **Organizational:** The M&E department oversees data collection and timely and accurate analysis and reporting so policymakers and program managers can use the data to make informed decisions.

Examples of Vision Statements

- **Personal:** I see myself giving speeches at an international Data-Use Conference building the data-use capacity of a new generation of M&E professionals.
- **Organizational:** We see our data producers and data users shaking hands and celebrating the elimination of new cases of HIV/AIDS resulting from targeted evidence-based policy and program decisions.

Materials

- Flipcharts—easel and paper
- Markers (enough for each team to have 3 or 4 colors)
- Tape
- Letter paper (for each participant)

Go to   **Slide 11: Transition slide to Session 2 Part 2**

SEGUE FROM LEADERSHIP BEHAVIORS

> **SAY:** One of the most universally recognized leadership behaviors is *inspiring*, but how do we inspire ourselves, much less others? Personal and professional values such as integrity, honesty, trustworthiness, and courage are definitely inspiring, but what is an action that a leader can take to inspire those around him or her?

> **SAY:** Developing and articulating a shared vision with the team is a participatory process that ensures all of the team members are inspired and motivated to take the necessary steps to achieve their vision.

ACTIVITY 1   **VISION VS. MISSION**

Duration
15 minutes

Go to   **Slide 12: Vision vs. Mission**

> **SAY:** Let's start by distinguishing a vision from a mission. A mission states why something exists. It answers the questions:
> - What do we do?—function;
> - For whom?—our clients;
> - Why do we do it?—purpose; and
> - How do we do it?—values.
>
> A vision is a picture of a desired future. It describes where the team or the organization wants to be in the future and what impact it wishes to have. It includes an image that you can see in your mind. Think of it as a dream—something that is almost unimaginable and unattainable—that results from your actions.

❑ Display flipcharts or show slides with the mission and vision statements on them

Go to   **Slide 13: Personal Mission vs. Vision**

> **SAY:** Here are what mission and vision statements look like for an individual.

Go to   **Slide 14: Organizational Mission vs. Vision**

> **SAY:** Here are what mission and vision statements look like for an organization. Can you see the difference?

❑ Stress the functional nature of the mission statements.

> **SAY:** For the purposes of this session, we are going to assume that the mission is a given. You are in a certain position and you have certain things you have to do. What is your mission? What do you do? For whom? Why? How?

> **SAY:** Take a couple of minutes and answer these questions for yourself and write down the answers to these questions as a mission statement—not longer than two short sentences.

❑ Ask a few participant volunteers to share their mission statements. Make sure that they have answered all the questions and prompt them if they haven't. The most frequently missed piece has to do with how you do it and relating this question to values. Look for adjectives and adverbs for the clue.

❑ Check for questions and understanding before going on.

ACTIVITY 2   **PERSONAL VISION**

Purpose
This exercise helps participants imagine the future and enables them to create or refine their personal visions.

Duration
20 minutes

Materials
- Prepared flipchart with: A vision is a picture we create in our minds of a desirable future toward which we can begin to act. Visioning enables us to play an active role in creating the future.
- Writing paper and markers.

Process

Go to   **Slide 15: Why is a vision important?**

Step 1: Introduction (10 minutes)

> **SAY:** Humans have a wonderful ability to create things in our minds, to dream, and to imagine the future. Unfortunately, people can misuse this capacity by imagining the worst possible outcomes. Let us instead use our minds to imagine a better, more pleasing future. In order to play a role in creating the future, you must first imagine what you want to happen.

❑ Reading from a flipchart or the slide…

> **SAY:** A vision is a picture we create in our mind of a desirable future toward which we can begin to act. Visioning enables us to play an active role in creating the future. Note that a vision is not a goal but a picture.

> **SAY:** A personal vision is one that you have for yourself, your dream of your personal impact. Some examples of personal dreams might be:
> - I see myself living in a house with three bedrooms,
> - I see my daughter in a cap and gown graduating from college,
> - My dream is to stand on the top of Mount Everest, or
> - My family is well-fed and healthy.
>
> Let's try it by doing a short visualization.

Step 2: Visualization exercise (20 minutes)

❑ Speaking slowly and softly…

> **SAY:** Relax, close your eyes or look down at the table to help you visualize. Imagine yourself five years from now. Imagine what you most want. It can be something in your personal or professional life. Nothing will get in your way or stop you; anything is possible. Remember that you want to see a picture.
>
> **ASK:** What are you doing? Who are you with? What does it look like when you look around?

❑ Give the participants about three minutes to develop a picture in their mind's eye.

> **SAY:** Now slowly come back to the present. Open your eyes.

❑ Ask participants to pick a partner for paired sharing of their visions.
   » They should speak in the present tense. ("I am doing…," "I have…," "I am with…," etc.)
   » They should be as detailed as possible in sharing their visions—colors, sounds, other details that popped out, etc.
   » The listener should listen only—no comments!
   » After two minutes, the partners should switch roles for another two minutes. (In other words, Partner A tells his/her vision to Partner B for two minutes and then Partner B tells his/her vision to Partner A for two minutes.)

❑ At the end of the time, ask the participants to return to the full group.

> **ASK:** What was it like to be the person sharing the vision? What did it feel like?
>
> **ASK:** What was it like to be the person listening? What did it feel like?

NOTE TO FACILITATOR: The responses to how it felt to be the person sharing their vision are usually both positive and negative. They might be scary or exciting: "I was embarrassed," "That was challenging," etc. Point to how infrequently we share our dreams and how difficult it can be on the one hand and how exhilarating it can be on the other hand. The usual responses to what it was like to listen are generally: "It was really exciting," "I didn't know that about her before," "I wanted to be part of making his dream happen," "Wow," etc.

> **SAY:** It is often a very powerful experience to listen to other people's dreams. It is exciting and inspiring to hear what other people dream of. It is that powerful experience that we want to replicate on our teams.

❑ Ask a few people to share their visions as examples. Be careful to give them positive and constructive feedback. If the vision sounds more like a goal or is not very visual, help them express it in these ways. Often people will say something like, "By 2016, I want to be promoted to [blank] job." That is a goal. The vision version of that would be, "I see myself sitting behind a large desk working on [blank]." Ask them to consider the difference between the two statements. Which is more compelling? Remind the participants that a vision is not a goal or a process—but the end result, the impact of what they do.

ACTIVITY 3   **SHARED VISION—IN A PICTURE**

Purpose
This exercise guides participants through the process of creating a shared vision using images and pictures rather than words. Drawing helps people connect with what is personally meaningful to them.

Duration
55 minutes

Materials
- Flipcharts—easel and paper
- Markers (enough for each team to have 3 or 4 colors)
- Tape
- Letter paper (for each participant)

Process

Go to   **Slide 17: Shared/team vision—Step 1**

Step 1: Create a picture of a desired future state (10 minutes)

> **SAY:** Now you are going to dream collectively about the future of your organization and the impact you could have due your team's effective use of data.
>
> Imagine that evidence-based policies and program decisions are made on a regular and consistent basis. Data is being used effectively and consistently.
>
> **ASK:** What is your vision for the impact in the organization, the health sector, or the country as a whole?
>
> First, individually make a quick sketch of the image that comes to mind and represents these achievements. Do not write it in words.

❑ Reassure the participants that this is NOT an exercise in great art. (See Note to Facilitator below.)

❑ Give the participants five minutes to do this. It is important that they work alone, that the room is quiet and that they work quickly. You don't want them to put too much thought into this. Go around the room and check for understanding of the instructions as well as progress.

NOTE TO FACILITATOR: Assure people that this is not a drawing contest, and stick figures are fine. This isn't about great artwork! Scrawls can represent or be a metaphor for something. Explain that the reason you ask them to draw a picture, rather than use words, is to make sure the vision starts as something they can see. Visions come from the creative side of the brain and people are likely to dream in more expansive ways when they draw than when they write.

Go to   **Slide 18: Shared team vision**

Step 2: Share drawings with other group members (5–10 minutes, depending on the size of the teams)

❑ Ask participants to share and explain their images within their teams.

❑ Ask them to note commonalities.

Step 3: Prepare one drawing/picture per group/team (20 minutes)

❑ Give each team a sheet of flipchart paper and different color markers if you haven't already.

❑ Ask each group to prepare one large drawing/picture (flipchart size) that captures the collective dream of the members in their group.

» This process encourages participants to contribute elements that are particularly important to them and leave out elements they do not consider as important.

» Again, this is not about fine art.

❑ Reinforce the idea that the impact needs to come from their team's role in DDU. Give them no more than 20 minutes to complete their drawings after they have shared their individual visions.

Step 4: Present team drawings (15 minutes)

❑ Ask each team to present its large drawing to the whole group.

❑ If necessary, have the team clarify parts of the drawing you don't understand. If other participants criticize what a team has drawn, the team should defend the dream in such a compelling way that the rest of the participants accept it. The drawings can be altered at any time.

❑ While the teams present their drawings, ask a participant from each team (or the co-facilitator) to write a summary of the elements and concepts shown in the drawings on a flipchart.

❑ This is a fun team activity, even though they may be shy at first. Give them encouragement. How do they feel about their own vision? Is it inspiring and motivating? Is it inspiring to the other teams?

Step 5: Review the common elements and concepts represented in the drawings (10 minutes)

❑ Write the common elements on a flipchart and in the large group, and review them with the participants.

> **ASK:** Is this what we most hope to accomplish through our leadership in data demand and use?

❑ Write a short vision statement based on these common elements to show the participants how they might use the information gained in the exercise to create a shared vision for the entire class. Start with "we see…" and write in the present tense. You don't have to be a wordsmith, but it is helpful to get it to the point where all the participants buy into the vision. This will be especially important where the teams come from a large organization or are at similar levels across the districts.

> **SAY:** The take aways from this exercise are (1) that everyone has a role in developing a shared vision and (2) that having a shared vision makes the team stronger and gives it a long term focus that inspires and motivates the individual team members to contribute their best to realizing the vision. Having a vision and using it to inspire others is a key leadership behavior.
>
> **ASK:** How might you use what you have learned about vision today in your organizations?

CONCLUSION   **LEADER SHIFTS**

Go to   **Slide 19: Leader shifts**

> **SAY:** To conclude this session, let's take a quick look at some of the changes we can expect when good leadership practices, including visioning, are used.

❑ Hand out *Leader Shifts*

❑ READ the model (or have two participants read it—one reading the from and the other reading the to).

> **SAY:** This graphic illustrates the changes that occur as a result of implementing the practices. We call them leader shifts. The value of leadership can be found not only in the achievement of goals and results, but also in organizational changes like those referenced on the slide. These represent the value of leadership as the heart of what you do.
>
> Your role as leaders in DDU is to:
> - Use the leadership and management practices to create an enabling work environment, improve management systems (especially those pertaining to M&E), and to anticipate and prepare for change to manage it effectively.
> - Develop and articulate a shared vision for DDU with ALL of your staff whether or not they are in the M&E department or are data producers or data users.
>
> Success will bring your dreams into reality.

END—Part 2

Session 3   Context of Decision Making

SESSION OVERVIEW	
Duration	1 hour
Purpose	• Participants understand the elements that define the context of decision making and the roles that stakeholders play in the decision-making process • Participants receive a brief overview of the *Stakeholder Engagement Tool* that is used to identify potential stakeholders and ways to engage them in order to increase DDU in decision-making
Learning Objectives	• Explain the context of decision making • Define the concept of stakeholders • Explain the importance of involving varied stakeholders throughout the decision-making cycle • Introduce the *Stakeholder Engagement Tool*
Preparations	• Read the facilitator notes for this session. You might want to add your own notes for further guidance • Prepare copies of all handouts • Prepare the required flipcharts
Materials	• Flipchart—easel and paper • Markers • Tape
Handouts	• Flash drive with all the DDU tools • *Quick Guide Version 2*, available at: http://www.cpc.unc.edu/measure/publications/ms-11-47
Note to Facilitator	A script is also found on the notes pages of the Power Point slides

START—Session 3

Go to   **Slide 1: Context of Decision Making**

> **SAY:** In this session, we are going to discuss the context of decision making. Specifically we will discuss:
> - who is involved in decision making,
> - what affects decision making, and
> - how to strengthen decision making to ensure that it is data informed.

Go to   **Slide 2: Session 2: Learning Objectives**

> **SAY:** By the end of this session, the learner will be able to:
> - explain the context of decision making,
> - define the concept of stakeholders,
> - explain the importance of involving varied stakeholders throughout the decision-making cycle, and
> - explain the purpose of the *Stakeholder Engagement Tool*.

Go to   **Slide 3: Session Overview**

> **SAY:** Specifically, we will discuss the context of decision making which includes stakeholders, the decisions they make, and the data they rely on. We will also discuss how to assess the many stakeholders who affect decision making and determine how best to engage them.

Go to   **Slide 4: Context of Decision Making**

> **SAY:** Here you see the three contextual elements for data-informed decision making—the involvement of stakeholders, data, and questions. ALL THREE elements are equally important. These three elements need to function in unison for data-informed decision making to take place. Let's first discuss stakeholders' roles in the context of decision making.
>
> **ASK:** What is a stakeholder?

❑ Allow time for a brief open discussion and summarize the points made by the group.

SAY: We define a stakeholder as anyone who has a stake, or interest, in your program. We often think of government agencies, policymakers, funding agencies, and implementers or providers as stakeholders.

❑ CLICK ANIMATION

SAY: We can also include the beneficiaries of health programs or civil society as stakeholders.

❑ CLICK ANIMATION

SAY: They make decisions about seeking services and continuing care. When we talk about stakeholders as part of the decision making process we often talk about data users and data producers.

❑ CLICK ANIMATION

SAY: As I said this morning, data users are those who use data to inform the design, implementation, monitoring, and improvement of health programs. Data users include:
• program managers,
• program directors,
• policymakers,
• service providers, and
• civil society.

We refer to data producers as the individuals that acquire and analyze health data. They prepare the data for distribution to an audience of users. Data producers can include:
• M&E specialists,
• data clerks, and
• researchers.

When it comes to decision making we typically think only of data users as our stakeholders. The focus is on those who have the authority to make the final decision about health programs and policies, but data producers play a key role in the data-informed decision-making process—they are the individuals who supply the data for the data-informed decision.

Involving the appropriate number of stakeholders and tailoring data to their needs can be a challenge. MEASURE Evaluation has developed a tool which can guide you in stakeholder selection and engagement—the *Stakeholder Engagement Tool*.

Go to   **Slide 5: Importance of Knowing Your Stakeholders**

SAY: Typically, stakeholder analysis is done in an informal, 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: it rarely happens the same way twice. As a result, the following scenarios are typical:

- Only data producers are included.
- Only those stakeholders in agreement with the proposed plan are invited to participate.
- 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 included thereafter 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.

Also, when working with different stakeholders it is important to recognize that each stakeholder may affect the data-informed decision-making process in different ways.

ASK: What might you want to know about your different stakeholders that may have an effect on how decisions are made? What characteristics may vary across a group of stakeholders that may affect how they use information to make decisions?

❑ After 3–4 responses, CLICK TO REVEAL ANIMATION

SAY: Different stakeholders may:
- view activities from different perspectives,
- have different degrees or levels of understanding,
- need or want different information,
- need information at different levels of complexity,
- have different intensities of interest, and
- have different roles in the decision-making process.

Go to   **Slide 6: Results of Involving Stakeholders in Data-Use Process**

> **SAY:** 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 1) they have been involved from the beginning, 2) they believe the data are of high quality, and 3) they feel the specific data addresses their priorities. Engaging stakeholders early and systematically in the process enables the right questions to be asked in the right way and, in turn, defines data activities that will generate usable, quality information.

Go to   **Slide 7: Stakeholder Tool**

> **SAY:** MEASURE Evaluation has developed a tool which is similar in nature to tools developed by other organizations—the *Stakeholder Engagement Tool*. It consists of a stakeholder analysis matrix and a stakeholder engagement plan.
>
> This tool helps us to systematically and formally assess all of our stakeholders. It clarifies who has an interest in the activity, what that interest is, who can help the activity and how, who can hurt it, and how this information can be leveraged to ensure success.
>
> Specifically the tool can:
> - identify stakeholders and define roles and resources;
> - identify dynamics among stakeholders, such as their level of influence, knowledge, and commitment;
> - set optimum stakeholder group and specify how to engage each stakeholder; and
> - define a follow-up strategy.

Go to   **Slide 8: Stakeholder Analysis Matrix and Engagement Plan**

> **SAY:** It helps you determine who are the important stakeholders to include for your project and develop a plan for how to engage stakeholders identified. While this tool encourages you to involve more people (which often makes people uneasy), it also teaches you to be strategic about how to involve them. However, the tool isn't recommending that you involve all of these stakeholders all of the time in every step.
>
> Another point to emphasize: often folks think they already know who the stakeholders are. They often think about the usual suspects who need to be involved.

> **SAY:** What they don't think about is if there are other stakeholders that you could add to improve their activity OR—as important—other stakeholders who could impede their activity.
>
> Using this tool gives you the information you need to use the leadership practice of aligning and mobilizing. By knowing who your stakeholders are and their influence, interests, and potential resources to support the decision making process, you can speak to what they are most interested in and be clear about how they can help.

Go to   **Slide 9: Stakeholder Engagement Resources**

> **SAY:** In the interest of time we will not be reviewing the tool in this workshop. Please refer to the MEASURE Evaluation website for more details or the *Quick Guide Version 2* provided in the workshop packet and flash drive.

Go to   **Slide 10: Context of Decision Making**

> **SAY:** Now let's discuss the role of data in the context of decision making. Data in the context of decision making refers to the following:
> - Promoting available data sources that meet the information needs of potential users and outlining the types of information contained in each data source.
> - Ensuring access to data resources so they can be easily use.
> - Ensuring regular sharing and feedback to improve the flow of information in a country.

Go to   **Slide 11: Data and Information**

> **SAY:** As you know, there are many sources of data and information that we can use in decision making, from the national level to the facility level, and even from ourselves as consumers or beneficiaries of health services. We have listed some of the more common sources on this slide. They include:
> - census;
> - surveillance data;
> - household surveys;
> - facilities-level service statistics (RHIS);
> - financial and management information;
> - modeling, estimates, and projections; and
> - health research.

Go to   **Slide 12: Reasons to Consider Information Flow**

SAY: Data flow is an important consideration. Data are often not used because of issues related to flow—the way in which data is collected, compiled, analyzed, and reported throughout the hierarchy of an organization.

Often, data are not used locally; instead, data are tallied and reported up to the regional and national levels, but they 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. Some other reasons to consider information flow include the following:

- Higher-level information does not return back to the local level. For example, district and regional officers might know from the available local clinic data that contraception rates are declining, but they may not know why. This may initiate further action of bringing all of the information sources and stakeholders together to determine possible causes.

- Local data are not assessed in broad context. For example, suppose a province has been struggling to reach their service delivery targets. They are only reaching 40% of the population in need when the target is 80%. Meanwhile two of the six districts in that province are reaching their target. If data were shared between districts, the low-performing districts would see that their neighbors were reaching their service delivery goals. This information could spark a discussion and the sharing of best practices.

- 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 paying attention to detail.

It is important to assess information flow and improve it so that data are available to all decision makers.

Go to   **Slide 13: Information Use Mapping Tool**

SAY: The *Information Use Map* was primarily created in response to these problems commonly encountered in health services. Data is often collected and reported, but it never seems to be used, especially at the local level where services are delivered.

> **SAY:** So the idea behind the tool was to help those at the service delivery level, who may collect and report data, to see how the data can be translated into information that can be used to improve their operations.
>
> It helps all stakeholder groups that collect data on health service delivery understand how data are eventually interpreted and used to make changes to the healthcare system.
>
> Health facilities that collect data can then:
> - identify ways they can use the information to improve their service delivery efforts, and
> - highlight missed opportunities for feedback from other stakeholder groups who conduct data analysis and interpretation.

Go to   **Slide 14: Information Use Mapping Tool**

> **SAY:** The *Information Use Map* documents the process from when data is collected to when it is reported and used. The goal of this exercise is to:
> 1. find opportunities to increase the number of stakeholder groups who translate data into useful information;
> 2. bring in those with experience delivering health services, use their insight to interpret data, and increase their use of this interpretation to make decisions about their health programs; and
> 3. identify ways that different actors can use information to provide constructive feedback to others in the health system.
>
> The achievement of these three goals will contribute greatly to improving both quality and production of data throughout the health service system. You can find a copy of the tool in *Quick Guide Version 2* and on the flash drive.

Go to   **Slide 15: Context of Decision Making**

> **SAY:** Finally, the questions asked by data users in the decision making process are also important. To make a decision about a program or policy, decision makers must first understand what is happening in their programs. They must ask questions about what is happening in the facilities, if disease rates are going down, and if the needs of their target populations are being met. The answers to these questions will help them to decide what they should do.

❑ CLICK ANIMATION

> **SAY:** In the context of our work, a decision cannot be made before a key programmatic or policy question is answered. It is the answer to this question that may provide the evidence that some kind of action needs to be taken to either improve or realign services.

Go to   **Slide 16: What Are Decisions?**

> **SAY:** Let's clarify what we mean by *decision*…
>
> What are decisions?
> - They are choices that lead to action.
> - They are informed by questions.
> - They should be based on data.
>
> For example, every day you need to make a decision about what to wear out of the house. To make this decision you may ask yourself some questions that will inform this decision:
> - What's the temperature outside?
> - Is it raining?
> - What events do I have planned for the day?
>
> To answer these questions you may consult the thermometer or the weather report or your daily calendar. You consult a data source to inform your decision. In the context of our work, a decision cannot be made before a key programmatic or policy question is answered. It is the answer to this question that may provide the evidence that some kind of action needs to be taken to either improve or realign services.

Go to   **Slide 17: Decision Areas that Need Data**

> **SAY:** In what areas can health service providers make better decisions based on data? There are four main types of decision areas in the health sector. They pertain to:
> 1. program design that meets the needs of a target population,
> 2. program management and improvement,
> 3. program evaluation and strategic planning, and
> 4. advocacy and policy development.

Go to   **Slide 18: Program Design**

> **SAY:** Decisions related to program design could involve selecting key messages for a prevention campaign that are relevant to a target audience.
>
> **ASK:** What goals are realistic? What targets do we set?

Go to   **Slide 19: Program Management and Improvement**

> **SAY:** An example of a decision that is relevant to program management could include deciding if a program is meeting its process objectives—for example, training the stated number of providers.
>
> An example of a decision that is relevant to program management could include deciding how best to allocate resources within a program.

Go to   **Slide 20: Program Evaluation and Strategic Planning**

> **SAY:** Decisions related to evaluation could include determining if new program approaches are needed to ensure that health impact objectives are met. Examples of decision making in strategic planning could include:
> * identifying geographic areas of highest need, and
> * identifying new or reinforcing existing collaborations with other organizations offering similar or complementary services and defining a working relationship.

Go to   **Slide 21: Advocacy and Policy Development**

> **SAY:** Finally, decisions around advocacy and policy formulation could include:
> * identifying and quantifying underserved populations in order to demonstrate a priority of an issue over many others, and
> * demonstrating a public health burden and the need for new policies.

Go to   **Slide 22: Why Consider Decisions?**

> **SAY:** Why do we need to focus on decisions? As we discussed earlier in the day, decision makers tend to be overwhelmed with data. They often don't know how to interpret data in the program or policy context. Or, they are unsure of which data source is most important to decision making.

SAY: In this context, decision makers may move ahead without consulting data at all, or they may spend precious resources on data analysis and interpretation that are not linked to action or programmatic needs.

By applying the leadership practice of focusing on the priority decisions for a specific programmatic area, decision makers can identify their information needs. This will allow them to narrow down the number of data sources they need to review and consider. It allows them to prioritize their data-use activities so that they can improve programs.

Go to   **Slide 23: Context of Decision Making**

SAY: Now let's look back at the entire context of decision making and the three necessary elements that we just discussed—stakeholders, decisions, and data.

Now that we have discussed the specifics of each element, it becomes clear that not only do you need to consider ALL THREE elements when making data-informed decisions, but that each element contributes to the other two.
1. When thinking of stakeholders, it is the varied data users that define information needs and the data producers who supply the data needed to make decisions and improve programs.
2. When you think of data, you need to involve the right data producers so they can provide the relevant information to the decision-making process.
3. When you think of decisions, you need to clarify what you need to know so you can collect the appropriate data.

All of these elements are part of a process. Decisions are not made at one specific moment in time. Information needs are identified; data is collected, analyzed, synthesized, shared, and reviewed; and then a decision is made. Many stakeholders are implicated in this process. Even if you are not a true decision maker with the authority to allocate funds and alter programs, you are still most likely part of the decision-making process.

Also of note is that these three elements are often influenced by external factors. Even if you have these three elements, a data-informed decision may still not be made because of the following:
- Political ideology and favoritism—decision makers may make health decisions based on what their political parties support rather than data.
- Public opinion—decision makers may decide to listen to public opinion rather than data because elections could be coming up.
- A decision may be made because the decision maker feels in his or her gut that it is "the right thing to do."
- There may be other economic, social, and cultural factors at play.

> **SAY:** Empirical data can provide a basis for discussion and influence these external factors over time.

> **SAY:** Let's review the key messages of this session that describe the path towards data-informed decision making. They include:
> - critically assessing the value of stakeholders and involving them in the process;
> - analyzing how information flows through the organization in order to find opportunities for greater access and sharing;
> - considering your organization's key decisions and information needs first—and then looking for answers—in order to save time and resources; and
> - involving both data users and data producers in the process.

❑ **Engage participants:** Ask if there are any clarifying questions on the subject matter covered in this session.

CONCLUSION   **CLOSING REFLECTION**

Duration
30 minutes

> **ASK:** What did you learn today? What stands out for you?

❑ Ask the participants to share. You don't have to hear from everyone, unless you have time, but it is important to get at least five or six comments because there is a lot of content in this day. You want to see if you can get people to say something about each element.

❑ Review briefly the agenda for the next day, tying it into day one's content.

END—Session 3

Session 4   Linking Data with Action

SESSION OVERVIEW	
Duration	All Day
Purpose	• Explain the 7-steps approach to using data in decision making • Practice applying the 7-steps approach • Introduce the *Framework for Linking Data with Action* as a management tool to guide team activities around the 7 steps • Create a framework for linking data with action to answer a specific program or policy question • Provide practical methods to reconcile discrepancies in data
Learning Objectives	• Understand the 7-steps approach to using data in decision making • Apply management and leadership practices to the 7-steps approach • Practice using the 7 steps • Create a management plan to apply the 7 steps to a program or policy question • Understand how to deal with data discrepancies
Preparations	• Read the facilitator notes for this session—you might want to add your own notes for further guidance • Prepare copies of all handouts • Prepare flipcharts with learning objectives
Materials	• Flipchart—easel and paper • Tape

Handouts	• Framework for Linking Data with Action
	• DHS Data
	   » Knowledge of HIV Prevention
	   » Women—Multiple Sex Partners & Use of Condoms
	   » Men—Multiple Sex Partners & Use of Condoms
	   » Review of Findings
	• Priority Question Scoring Worksheet
	• Group Exercise: Seven Steps of Using Information in Decision Making
	• A Public Health Questions Approach
	• Group Exercise: Data Discrepancies

Note to Facilitator	A script is also found on the notes pages of the Power Point slides

START—Part 1: Seven Steps of Using Information for Decision Making

Go to   **Slide 1: Linking Data with Action**
                    Slide 2: Session 4: Learning Objectives

> **SAY:** By the end of this session, you will be able to:
> - understand the 7-steps approach to using data in decision making,
> - apply management and leadership practices to the 7-steps approach,
> - practice using the 7 steps, and
> - understand how to deal with data discrepancies.

Go to   **Slide 3: Session Overview**

> **SAY:** Specifically, we will discuss the following:
> - The 7 steps of data-informed decision making and how leadership practices can be applied to the 7 steps of data use.
> - Next we will practice using the 7 steps in small groups using a case study example.
> - We will then implement a second small group activity using the *Framework for Linking Data with Action*. This framework is a management tool that facilitates the implementation of the 7 steps.
> - Lastly we will address how do deal with data discrepancies when confronted with them in decision making.

Go to   **Slide 4: Why Use the 7 Step Approach**

> **SAY:** Why should you use the 7-steps approach?
> - Because it provides concrete steps that lead to data-informed decision making.
> - The approach encourages more strategic and effective use of data.
> - And finally, it ensures the involvement of both data users and producers.
>
> The 7-steps approach provides concrete steps to a process that is often ill defined. Yesterday we talked about the decision-making process and the three elements of data-informed decision making that need to be in place for that process to function. Today we will discuss the concrete steps that you can follow once you sit down with your stakeholders to address your decision-making needs.

> **SAY:** As I introduce the 7 steps, I will also be referencing the leadership and management practices we presented yesterday to remind you of their practical application in working with your teams and, more importantly, to specifically illustrate their relationship with DDU activities and tools.

> **SAY:** What are the 7 steps? MEASURE Evaluation has identified 7 steps to facilitate use of information.
>
> • Step 1 involves identify your questions of interest. Yesterday we talked about decisions. Decisions are choices you will have to make to implement health programs. All decisions are informed by questions. Step 1 involves identifying your questions that will inform your decision.
>
> **ASK:** Thinking back to the leadership practices we presented yesterday, what one do you suppose this is?

❑ Give the participants time to think and respond.

> **SAY:** This is an exercise in scanning. You know that you need to make a decision, but in order to choose your question; you have to scan the context—both internal and external—in which the decision is to be made in order to choose your question.
>
> • Step 2 involves prioritizing your questions to ensure you are spending your limited resources answering a question that has high programmatic relevance.
>
> • Step 3 identifies the data needed to answer the question. In some cases you may need to consult multiple, existing data sources. In others, there may be a data gap—and the data you need may not exist. In this case you may consider using proxy data or, if the question is important enough, implement a research effort to gather the required data.
>
> Both steps 2 and 3 relate to the leadership practice of focusing. As we saw earlier, your role as leaders in DDU involves scanning the context in order to choose the questions, helping your team to prioritize the questions developed in step 1, and identifying the data sources. Both prioritizing and identifying the data are activities performed in focusing.

SAY

- In step 4, once the data sources have been obtained, the data need to be transformed into information through analysis. Analysis is the act of turning raw data into more useful information. Depending on the question, analysis can be simple math or more sophisticated computations. The resulting information then needs to be presented in a way that is clearly understandable—via graphs, charts, and other visual aids. When considering how the data should be presented, it is important to think about your target stakeholders. Who are your target consumers of the data? What is their ability to interpret the information presented? Is the format clear enough for decision makers to interpret?

- The terms *analysis* (step 4) and *interpretation* (step 5) are often considered synonymous. We like to separate them into distinct steps. In step 5, interpretation is the consideration of the analysis—the potential reasons for the findings—and possible next steps. In this process, we move from what is happening in our programs to why it is happening.

- Step 6 involves discussing and agreeing on the recommendations for change based on the conclusions. What types of actions do you want decision makers to take given their interpretation of this analysis? Keep in mind the level of decision-making authority of the target stakeholder who will be looking at this analysis. What will they be able to do differently to improve performance? What resources will be at their disposal to make necessary changes? Will they be in a position to advocate for additional resources if needed?

When we apply leadership and management practices to these steps, we can see that steps 4 and 5 require the use of the management practices of planning and organizing.

ASK: What leadership practice do you think step 6 might require?

❑ Give the participants a moment to think and respond.

SAY: Any time you are bringing decision makers and stakeholders together to agree to certain activities or to adopt your recommendations you are using the leadership practice of aligning and mobilizing. Often a clue to when you are using this practice is when you use the word *advocate* or the phrase *call to action*.

- Step 7 involves a continued commitment to the data-informed decision-making cycle. If changes are implemented based on the data analysis, it is important to continue to track the outcome of those changes. As discussed in day one, the data-informed decision-making process is a cycle where successful use of data leads to demand for future data.

> **SAY:** While this step relates to the management practice of implementation, it also relates to the management practice of monitoring and evaluation because you will be tracking the outcomes of the changes.

Go to   **Slide 7: Applications of 7 Steps**

> **SAY:** There are often two situations that require application of the 7 steps, and they are not mutually exclusive:
> 1. New data are released that have programmatic relevance, and you will need to understand the implications of that new data.
> 2. There is an upcoming decision that needs to be made, or you have a specific question about your program or your target populations.
>
> These two types of situations will prompt your organization to begin the 7 steps.

Go to   **Slide 8: Step 1—Identify Questions**

> **SAY:** Vast amounts of data are available to many HIV/AIDS service delivery sites. However, to compile, analyze, interpret, and use these data can be a very daunting task that requires both time and skill. Rather than embarking on a fishing expedition, a team of data users and data producers can use its time more efficiently by first identifying and then prioritizing key questions of interest. Available data can then be analyzed in a targeted way to begin to answer these questions. Programmatic questions of interest can be identified by:
> * conducting participatory discussions about indicators that demonstrate program success;
> * conducting discussions about observed or anecdotal problems that program managers face;
> * conducting discussions about upcoming planning decisions that need to be made and asking what questions will inform those decisions;
> * gathering feedback from clients; and
> * assessing external factors, such as audits, program evaluations, and donor's questions.
>
> Any of these methods can generate interesting and useful questions.
>
> **ASK:** What leadership practice might you apply during this step?

❑ Give the participants a moment to think and respond.

> **SAY:** The leadership practice you may use in this step would be *scanning*.

> **SAY:** Now we are going to walk through an example where you are presented with some data from the *2010 Demographic Health Survey,* and using the 7 steps, you will determine what these data actually mean for the programs you manage. Please refer to the handouts of the three data items from the DHS that we will be discussing in this example.

> **SAY:** Here is a bar graph from *DHS Data: Knowledge of HIV Prevention*. The graph compares the percentage of women and men aged 15 to 49 who responded that the three listed prevention methods can reduce their risk of contracting the AIDS virus.
>
> On the vertical axis we have percentages. On the horizontal axis, there are three HIV prevention categories. The prevention categories are:
> 1. using condoms,
> 2. limiting sexual intercourse to one uninfected partner, and
> 3. the combined approach of using condoms as well as limiting sexual intercourse to one uninfected partner.
>
> The orange bar shows the response categories for women, and the green bar shows the response categories for men.
>
> The data indicates that knowledge of condoms as an HIV prevention method is high, knowledge of limiting sexual intercourse is a bit lower, and the two in combination is the least mentioned approach.
>
> Also you see some differences between men and women's knowledge of limiting sexual intercourse and this prevention method in combination with condom use.

> **SAY:** Here are two stacked bar charts that show the percentage of women who use condoms by two categories. Again the vertical axis is a percentage, and the horizontal axis represents the two categories.
>
> The first category, on the left, shows that 0.6% of the women surveyed reported to have two or more partners in the past 12 months.

> The second stacked bar chart on the right shows that of the 0.6% of women who reported having two or more partners in the past 12 months; 28.9% reported NOT using a condom during their last sexual intercourse.

> **SAY:** Here are two stacked bar charts that show the same information, only for men. In the first chart, on the left, we see that 4.2% of all men surveyed reported to having two or more partners in the past 12 months.
>
> The second stacked bar chart on the right shows that of the 4.2% of men who reported having two or more partners in the past 12 months; 25.5% reported NOT using a condom during their last sexual intercourse.

> **SAY:** So let's review the findings:
> - About 10% of men and women surveyed didn't know that using condoms can reduce the risk of acquiring HIV.
> - 85% of women and 79% of men knew that limiting sex to one uninfected partner can reduce their risk.
> - 79% of women and 74% of men knew that the combined strategy of condom use and limiting sex to one uninfected partner reduced their risk.
> - Of the 4.2% of men who had two or more partners, 25% did not use a condom the last time they had sex.
> - Of the 0.6% of women who had two or more partners, 28.9% did not use a condom the last time they had sex.

> **SAY:** Now based on these findings, we wonder: what does this mean for my programs? Are they working or not? Am I supposed to do something differently? Is action required? To answer these questions, you will need to ask a few additional questions.
>
> **ASK:** Given this data, what more would you want to know?

❑ Give an opportunity for a few participants to briefly give their responses. Note their responses on flipchart paper.

SAY: For this example, we first need to establish if there is a problem with our prevention programs or if these data are acceptable outcomes. If there is a problem we will want to know the size and scope of the problem. This is where we are identifying our questions—step 1 of the 7 steps. Our specific questions are:

- What is the target populations that are affected by insufficient knowledge of risk reduction strategies and a practicing risky behavior, and who are the partners of these high risk groups?
- How does unprotected sex with these partners impact HIV prevalence?

Go to   **Slide 16: Step 2—Prioritize Questions**

SAY: Once we have an idea of what questions need to be answered to define the size and scope of the problem, it is important to consider if answers to these questions are a priority. To prioritize questions, your team must consider specific criteria.

- Programmatic relevance—Is the question programmatically relevant and/or of a public health interest? Are others in the community interested in the information? Is this issue part of your national strategic plan?

- Answerable—Is it possible to answer this question of interest with existing data or data that can be collected?

- Actionable—Does your organization have the authority to act upon the answers to the questions of interest? That is, if data indicates a need for a change in the current course of action, can your organization make the required changes? If not, can your organization influence those with the authority or ability to affect change?

- Timeliness of the question—Is there a timeline for answering this question or making a decision about the issue at hand? Can some key questions be tabled for discussion later to allow the group time to focus on questions that must be addressed more quickly?

Let's apply these to our DHS examples. We have questions about the size and scope of high-risk behaviors such as multiple partners and lack of condom use.

Are these questions programmatically relevant? It is important to note that the reduction of risky sexual intercourse is a core component of the national, five-year HIV prevention strategy. Understanding what these findings mean is important to the implementation and evaluation of the national strategy. Therefore these questions are worthy of further investigation.

SAY: Are these questions answerable? Is sufficient data available to inform these questions? Some data are available in the DHS related to the behaviors of the men in question, and there is also national-level data on HIV prevalence. It is more than likely that sufficient data exists to answer this question. We will discuss the issue of data in more detail in the next steps.

Assuming your analysis indicates that a change in the current course or action is required, can your organization make that change? For example, could your organization design and implement programs to increase condom use in the target population?

And lastly, how time sensitive is an answer to this question? Are there other competing priorities and questions that need to be addressed first?

All of these questions should be considered before embarking on conducting your analysis.

MEASURE Evaluation has a matrix that can be used to prioritize questions. A copy of this tool, the *Priority Questions Scoring Worksheet*, can be found in your packet of handouts. This matrix is a useful tool to facilitate discussion about each question and to reduce the influence of special interests or agendas. The criteria can be defined differently or new criterion can be added. It's not necessary to use this tool, but it may be helpful in some contexts.

What leadership practices might you apply during this step? The leadership practices you may use in this step would be focusing and aligning/mobilizing.

Go to   Slide 17: Step 3—Identify Data Needs & Sources

SAY: Let's go back to our DHS example to illustrate step 3. Now that you have prioritized these questions, you need to identify your data needs to address those questions. For this example, one of our priority questions is: what is the size and scope of the problem?

While only 4% of all men had sex with more than two partners in the previous 12 months, the fact that 25% of them did not use condoms could be significant. It depends on who their partners were, our second prioritized question, and the prevalence of HIV among those cohorts.

❑ **Engage participants:** Ask your participants to suggest existing data sources that could answer the above questions. Possible answers include the DHS, a Behavioral Surveillance Survey (BSS), or other online data bases. List the sources of information cited on flipchart paper.

❑ CLICK TO REVEAL ANIMATION

❑ Remember to identify data needs and sources, engage data producers, start with data that already exist, and consider the quality of that data.

> **SAY:** What management practice might you apply during this step? The management practices you may use in this step would be planning on what data sources to use and how to conduct the analysis.

Go to   **Slide 18: Step 4—Transform Data into Information**

> **SAY:** Once specific data sources have been identified and obtained to answer your questions (as we saw in step 3), the data can be transformed into information to facilitate decision making and action. Transforming data into information involves the following:
>
> - Isolating the required indicators and data elements—this step may require simply referring to a table in a report, or it may require going back to a database to extract the specific information needed to answer the question.
>
> - Analyzing the data and calculating the indicator—a variety of analysis techniques are available to facilitate decision making. They range from simple to complex. They entail reviewing and examining data and transforming them into useful information—usually a visual image such as a graph, chart, or table. Many potential data users are more attentive to and have a better understanding of numbers when they are presented in a graph or table. For example, some data users find it easier to understand the proportion of a whole from a pie chart rather than from raw data. This helps data users to interpret the meaning behind the data.
>
> **ASK:** What management practice might you apply during this step?

❑ Give the participants a moment to think and respond.

> **SAY:** The management practice you may use in this step would be organizing who is most able to 1) conduct the analysis and 2) present the data as information that can be easily interpreted by the targeted data user(s).

Go to   **Slide 19: Step 5—Interpret Information and Draw Conclusions**

> **SAY:** Next is step 5—interpreting information and drawing conclusions. The terms and concepts of analysis and interpretation are sometimes considered synonymous and are often combined into one process. In the 7 steps, however, these processes are separated into distinct steps—steps 4 and 5.

> **SAY:** While analysis can be conducted effectively by one person or by a team of people with different backgrounds, interpretation is most productive when a group of data users and data producers is involved. Step 5 is a process by which key stakeholders discuss the meaning of a specific finding and draw conclusions about this information through group discussion. They move from what is happening in a program to understanding why it is happening.
>
> **ASK:** What leadership practice might you apply during this step?

❑ Give the participants a moment to think and respond.

> **SAY:** The leadership practice you may use in this step would be inspiring those key stakeholders to make informed decisions based on the data presented.

Go to   **Slide 20: Interpreting Data**

> **SAY:** Let's take a more in-depth look at data interpretation.

Go to   **Slide 21: Interpreting Data**

> **SAY:** Data interpretation is the process of making sense of the information. It allows us to ask, what does this information tell me about the program? Here, you see a flow chart of the steps involved in interpreting data. When interpreting data you want to consider:
> *   the relevance of the findings,
> *   the reasons for the findings,
> *   other data sources relevant to the findings, and
> *   whether further research is needed.

Go to   **Slide 22: Interpretation—relevance of findings**

> **SAY:** We start by wanting to know the relevance of our findings which is discovered by making meaningful connections and comparisons in the information as well as exploring causes and consequences.

Go to   **Slide 23: Interpretation—relevance of findings**

> **SAY:** When interpreting data and seeking the relevance of our findings, we may ask these questions:
> - Is there anything that surprises you in the data?
> - Are there any highs and lows in the data?
> - How does the indicator compare to other time periods and other facilities?
> - How does the indicator compare to the target/ideal?
> - How far from the target/ideal is it?
>
> Asking these questions will help you to put the data in the context of your program.

Go to **Slide 24: Interpretation—possible causes?**

> **SAY:** When seeking potential reasons for the finding, we often will need additional information that will put our findings into the context of the program. Supplementing the findings with expert opinion is a good way to do this.
>
> For example, talk to others with in-depth knowledge of the program or target population and get their opinions about possible causes. If your data show that you have not met your targets, you may want to know:
> - is the community or target population aware of the service, and
> - have a sufficient number of awareness campaigns been implemented?
>
> To answer these questions, you ask community leaders, program managers, subject matter experts, or providers for their opinions. Sometimes ad hoc conversations with experts are insufficient. To get a more accurate explanation of your findings, you often will have to consider other data sources.

Go to **Slide 25: Interpretation—consider other data**

> **SAY:** To answer your interpretation questions you may need to bring in additional data to look at comparisons and targets. What we mean by this stage is that if additional data is available to verify your conclusions, it is always good to have multiple sources to strengthen credibility. For example, if there was recent qualitative research available that helped to further explain or verify your findings, it would be important to include them in the interpretation.

Go to **Slide 26: Interpretation—conduct further research**

> **SAY:** Once you review additional data, it may become apparent that these data are not sufficient to explain the reasons for your findings—that a data gap exists. In these instances, it may be necessary to conduct further research.

> **SAY:** The types of research designs that are applied will depend on the questions that need to be answered and will be tempered by the feasibility and expense involved with obtaining the new data.

Go to   **Slide 27: The findings**

> **ASK:** Given this data, what more would you want to know?

❑ Give an opportunity for a few participants to briefly give their response. Note the responses on flipchart paper.

Go to   **Slide 28: Step 6—Craft Solutions and Take Action**

> **SAY:** Now let's go back to our 7 steps. In our DHS example, we looked at AIDS prevention knowledge in general and behaviors among men and women with multiple sex partners. I described possible programmatic questions that would define the size and scope of the problem. Then in Step 2, I offered some criteria to prioritize those questions. Now that we have identified additional data sources, translated that data into information, and interpreted our information, we can start to craft a solution and take action.
>
> Step 6 entails convening a meeting with relevant data users and producers to:
> - use the conclusions identified in the previous step to brainstorm potential solutions,
> - further specify and prioritize these solutions in order to respond to the problem, and
> - develop an action plan for implementing each of these solutions.
>
> It is important to recognize that sometimes programs meet their performance expectations, and the only action required is to inform stakeholders of successful efforts and not change the program implementation in any way.
>
> **ASK:** What management practice might you apply during this step?

❑ Give the participants a moment to think and respond.

> **SAY:** The management practice you may use in this step would be implementation—applying the conclusions drawn from the information to decide how a program or new policy is delivered.

Go to   **Slide 29: Step 7—Continue to Monitor Key Indicators**

> **SAY:** Step 7 entails monitoring of key indicators. If your data-use exercise in-
> dicated a programmatic change, you will need to monitor the effect of that
> change on the indicator in question.
>
> Using our DHS example, if your analysis indicated that you needed to improve
> your risk-reduction programs by implementing intensive peer education of
> the target group, you would then need to monitor those activities to deter-
> mine if they resulted in higher levels of knowledge of risk-reduction behaviors
> and ultimately a reduction of the risky behavior itself.
>
> This step is critical to determine not just the value of data-use program im-
> provements, but also of the value of your overall program in reaching intend-
> ed outcomes and impacts.
>
> The course you choose will depend on a variety of factors including the size
> of the program or facility, the nature of the priority questions of interest, and
> whether or not any problem was highlighted during the process of interpre-
> tation (step 5).
>
> Many programs have developed their own framework for improving the qual-
> ity of their program or service and have designed tools, such as spreadsheets
> and dashboards, to monitor their efforts at program implementation and im-
> provement.
>
> A basic table or graph can be used to monitor an indicator over time.

Go to   **Slide 30: Seven Steps Approach**

> **ASK:** Are there any questions about the 7 steps?

❑ Give the participants a moment to think and respond.

Go to   **Slide 31: Group Exercise**

❑ Introduce the group exercise and hand out copies of the group exercise.

> **SAY:** Now we would like each team to work through the 7 steps using anoth-
> er example. Please refer to your handout entitled *Group Exercise: Seven Steps
> of Using Information in Decision Making.* Could someone please read the back-
> ground, decision, task, and instructions on page 1 of the handout?

❑ Wait for participant to finish reading from page 1 of the handout.

SAY: In this exercise, we have already provided you with prioritized questions on the second page of the handout:
- What is the estimated size of the FCSW population in each province?
- What is the HIV prevalence in the FCSW population in each province?
- What is the performance of HIV prevention activities in each province?
- For the province with the lowest performance, what were the problems?

For this exercise you will begin with steps 3 and 4: identify data needs and potential sources, and transform data into information. Your first discussion as a group will be to identify data sources that can assist in answering the questions in this slide and transform that data into information. You are given space in the handout after each data source to take notes on your group discussions about the data source.

Each group has 20 minutes to review all data sources and discuss interpretations among your group members. Each group should agree on some conclusions about each data source and take notes in the boxes provided in the handout.

❑ **Engage participants:** While groups are discussing, both facilitators must visit the groups help them understand the data sources.
  » After about 15 minutes, both facilitators encourage each group to start to discuss the benefits and limitations of the data sources they have listed.
  » At 20 minutes, begin step 5: interpret information and draw conclusions.

SAY: Now that you've transformed your data into information through a review of data sources, we need to interpret that information, craft solutions, and create indicators to monitor. In this stage of the exercise your group needs to reach consensus about what the information means and how it may provide answers to the questions in this slide. Over the next 20 minutes, complete steps 5 through 7 on page 7 of the handout.

❑ **Engage participants:** While groups are discussing, both facilitators must visit the groups and help direct them toward parts of the data that may be relevant to these questions. Remind participants of the steps involved in data interpretation:
  » Assess relevance of findings: make connections and comparisons as well as explore causes and consequences.
  » What are possible reasons for findings: are there experts to consult?
  » Consider other data: do we need to look for another data source?
  » Conduct further research: Is there a data gap?

❑ **Engage participants:** For step 7—monitor key indicators—both facilitators can suggest possible evaluation strategies such as:
  » Compare a key indicator in the six months preceding the intervention and then six months after the intervention is complete. AND/OR

» Compare rates of increase of a key indicator in two different districts. Compare the indicators for the province where you intervened to those of the province where you did not intervene. When you compare sites, remember to track inputs so you can ensure that you are comparing similar provinces.

❑ Once 10 minutes are up, have a representative from each group provide a brief overview of their statement to DANIDA which includes:
  » the province selected for additional resources or the kind of additional research needed to make a decision,
  » why this province was selected,
  » activities to improve services for FCSWs, and
  » at least two indicators to monitor performance.

❑ Try to keep explanation to 10 minutes, only hearing from select groups if necessary.

Go to   **Slide 32: Building Data Use into Your Work**

> **SAY:** Now let's discuss the practical aspect of data use. How can you manage to build data use into your work? How do you ensure that data use becomes part and parcel of your organization's day-to-day duties? The answer is to PLAN for it.
>
> The first strategy is to make this a team effort. As leaders in your organizations, it is important to inspire, align, and mobilize others to participate. The key here is to involve the data users and data producers so that you fully understand:
> • the decisions they make,
> • the information they need, and
> • the best way to present that information.

Go to   **Slide 33: Building Data Use into Your Work**

> **SAY:** To build a culture of data use in your organization, it will require making data use a part of the day-to-day functioning of the organization. As a leader you can lead and demonstrate good data-use behavior; however, for this culture change to really spread throughout the organization, you will need to ensure that processes exist to help you in this endeavor. Suggested methods of implementing DDU support in your organization include the following:
>
> • Regularly scheduled meetings between data users and data producers to discuss data, review it, interpret it, and draw conclusions from it. You can also use this time to discuss any upcoming decisions for which you need to conduct analysis or any programmatic issues that need to be investigated. It is important that these meetings are regularly scheduled and that key stakeholders are encouraged and supported to attend.

SAY

- You can appoint a DDU committee or champion that will ensure that meetings take place and that other supports are implemented and functioning.

- If you have the authority, you can revise job descriptions to ensure that DDU activities are the responsibility of specific employees.

- You can develop policies or prepare and distribute guidance to colleagues that explain how to conduct data reviews, data sharing, the 7 steps, etc. By committing these activities to paper and sanctioning them, colleagues are more likely to implement them. This also communicates the value the organization is placing on data use.

Some of these suggested approaches may already be part of how you do business and some may not.

Go to   **Slide 34: Building Data Use into Your Work**

SAY: We have discussed a few tools that can help you to implement DDU activities. These tools are designed to help your organization institutionalize the use of data to inform decisions. The more people within an organization who know about and understand these tools, the greater the demand becomes for using quality data to inform programs.

We have talked about a few tools that are available such as the *Stakeholder Engagement Tool*, the *Information Use Map*, the *Priority Questions Scoring Worksheet*, and the *7 Steps to Use Information to Improve Programs*.

There is an additional tool that can help you get started with the 7 steps and manage the use of data to make a decision within your organization. This tool is the *Framework for Linking Data with Action*.

Go to   **Slide 35: Framework for Linking Data with Action**

SAY: The *Framework for Linking Data with Action* helps you to plan and align your team around making an evidence-based decision while still meeting the other demands of your job. Everyone on your team already has a job with a full workload in their specific program area. It can be hard to the find time to come together and work toward regular data use. The *Framework for Linking Data with Action* helps to keep everyone on the same page, especially while managing other work priorities. It's a management tool—a combination of template and process—that serves three key purposes:

> **SAY**
>
> 1. It creates a time-bound plan for data-informed decision making by setting dates by which data should be reviewed in relation to key programmatic questions and upcoming decisions.
> 2. It encourages greater use of existing information by identifying data resources and linking that information with the programmatic questions that need answers in order to support evidence-based decision making.
> 3. It provides a data-informed decision-making record—which can also be used as a timeline—for monitoring the use of information and conducting analyses to support decision making.
>
> You can find a blank template of the *Framework for Linking Data with Action* in your handout packet.

Go to   **Slide 36: Framework for Linking Data with Action**

> **SAY:** To orient you to the tool, let's go back to our DHS example. In this example, we identified two questions based on the DHS findings:
> 1. What populations are affected (men and partners)?
> 2. What is the prevalence in these populations?

Go to   **Slide 37: Framework for Linking Data with Action**

> **SAY:** Then we fill in the data sources that we will access in order to answer this question. In this example, I have indicated the DHS, a behavioral surveillance survey, and the national health information system for routine data collected at health facilities.
> - In the next column (the third column), we will specify the exact indicators in each data source that will answer the question
> - The fourth column is where we'll indicate the date by which we could conduct the analysis, interpret the data, draw conclusions, and make decisions.
> - The fifth column—labeled *Decision Maker/Other Stakeholders*—is where we'll indicate the name of the decision maker that we will target with our completed analysis. The other stakeholders are the names of the individuals who will be involved in the data-use process.
> - The sixth column is where you indicate the decision or action that needs to be taken based on the solutions that your team has come up with.
> - The seventh column is where you will list the best possible methods to communicate with those decision makers and stakeholders that can help you to implement those proposed solutions.
>
> You will be filling out a *Framework for Linking Data with Action* in the next small group exercise.

> **ASK:** Are there any questions about the framework?

❑ Pause for questions.

> **SAY:** With the 7 steps, we saw a systematic approach to using data to answer important programmatic questions. Often it is the case that a team of data users and data producers cannot work through all 7 steps in one meeting. There are actions that require commitments from specific actors to bring together parts of the 7 steps for the team to discuss and utilize for moving forward, such as identifying data sources, analyzing data, and presenting data.
>
> The *Framework for Linking Data with Action* that I just described is a management plan designed for every member of your team to agree on priorities, know where they are in the process of implementing the 7-steps approach, and know who is responsible for specific activities.
>
> With this in mind, we would now like to give your groups the opportunity to apply these tools to your specific organization and program settings.
> In your handout packets we have provided you with blank templates of the *Framework for Linking Data with Action*. We now want you to think about what questions you would like to know about a specific program that your organization is currently implementing.
>
> What would you like to have more information about in order to assess or improve the services you are currently delivering? It is important to think about what you really need to know to significantly help your organization provide their services. What key programmatic decisions do you make, and would having the appropriate information make you feel more confident that you are making the right decision?

Go to   **Slide 38: A Public Health Questions Approach**

> **SAY:** Trying to decide what aspects of a large health program require further data can be challenging. As you begin your group discussion about the questions you have regarding your programs or the decisions that you will need to make in the near future, you may want to refer to in your handout packet: *A Public Health Questions Approach*.
>
> When you are starting from a situation of identifying what you need to know about your programs, it is sometimes very clear what your questions are. You may see a decrease in clients attending specific services or you may hear anecdotal accounts from colleagues of problems with service delivery. Other times it may not be so easy to pinpoint your specific questions.

SAY: Or, you may be trying to review your problems before they arise. In these last two situations you may wonder:

- How do I start?
- How do I identify a programmatic question of interest?
- How do I demonstrate my program's successes or failures?
- How do I know if it's working?
- Which planning decisions do I need more information about before I can make a decision?

A Public Health Questions Approach was developed by Deborah Rugg and colleagues at UNAIDS for monitoring and evaluation of HIV programs. This tool can help you with that first step in the 7-steps approach—identifying questions of interest. Think of your program activities in terms of…

❑ CLICK TO REVEAL ANIMATION

SAY
- What problem are we trying to address? Refer to the bar on the bottom of the diagram, and this is what we answered in our earlier DHS example.
- Are we doing the right things? Refer to the next three bars in light blue. The questions you might think about in this category are:
    » What interventions and resources are needed?
    » What interventions can work (efficacy and effectiveness)?
    » What are the contributing factors to the health problem?
- Are we doing them right? Refer to the next three bars in purple. The questions you might think about in this category are:
    » Are interventions working or making a difference?
    » Are we implementing the program as planned?
    » What are we doing, and are we doing it right?
- And finally, are we doing them on a large enough scale? Refer to the top bar in the diagram.

When trying to pinpoint which questions you have, consider what aspects of your program would most benefit from having more information in order to make informed decisions. When you've selected the category of question that interests you, use the corresponding questions to brainstorm, or list, all potential questions that would be useful for your organization to know in order to make informed decisions about how services are delivered.

Again, this framework is designed for helping your team complete step 1 only—to identify questions of interest that, if answered, could greatly improve the health services your organization provides. You may choose not to use it. Once those questions have been identified, you then proceed to step 2—to prioritize those questions.

ASK: Are there any questions about this approach?

❑ Give the participants a moment to think and respond.

> **SAY:** We have allocated two-and-a-half hours for you to work in your groups and apply the 7-step approach. Groups will spend the remaining time before lunch brainstorming questions (step 1 in the 7 steps and column 1 in the *Framework for Linking Data with Action*). You will then identify the one pro-grammatic- or policy-oriented question that the group agrees is the top pri-ority.
>
> After lunch, we would like you to fill in the rest of the columns in the *Frame-work for Linking Data with Action* to describe how your groups will implement the 7 steps to answer these questions of interest. Once you have completed your frameworks, we will collect them and make copies for each member of your groups.
>
> Tomorrow we will look at some of the institutional barriers to regular data use in your organizations and develop action plans to overcome those barriers. Implementing these action plans will be your group project over the follow-ing six weeks. In Module 2, we will look back at the frameworks and action plans to see how the groups were able to effect changes to data use using these management plans.

❑ **Engage participants:** While the groups are discussing, both facilitators must visit each group and help them think through the 7 steps and articulate what needs to be done in the *Framework for Linking Data with Action*.

❑ Once the groups have completed their framework templates, give each group an opportunity to present them to the rest of the participants.

❑ After the presentations, have each group provide a copy of their frameworks to the facilitators. Facilitators will then make copies for their records and for each member of the group.

These frameworks will be used to reflect back on the six weeks of implementation during Module 2. They (and the action plans) will be used by the facilitators to guide coaching sessions to group members over the six weeks preceding Module 2 (see Ap-pendix 3 for Coaching Guide).

END—Part 1: Seven Steps of Using Information for Decision Making

START—Part 2: Understanding Data Discrepancies

Duration
1 hour, 30 minutes

Go to   **Slide 1: Understanding Data Discrepancies**

> **SAY:** In this session we are going to address the issue of data discrepancies.

Go to   **Slide 2: What are data discrepancies?**

> **SAY:** What are data discrepancies? This is when you encounter two different estimates for the same indicator from two separate studies or data sources. This puts us, as decision makers, in a difficult situation—we need to know which estimate to use to inform our decision. We need to know:
> * Why does this happen?
> * How do we interpret this information in decision making?
>
> Let's look at this through an example: here you see figures for HIV prevalence among men and women of reproductive age for country X in 2007. The DHS estimates 4.1% and sentinel surveillance estimates 6.4%. You wonder:
> * Does the difference matter?
> * Which estimate should I use?

Go to   **Slide 3: What contributes to data discrepancies?**

> **SAY:** To answer this question, we need to consider what causes data discrepancies. There are many things that can cause discrepancies in data. In today's discussion we will touch on some of the largest issues.
>
> When faced with a data discrepancy, the first thing to investigate is if there are any differences in the study population or the specific samples included in the study. Researchers rarely survey an entire population of interest—unless they are conducting a census or the population of interest is small—as this is extremely expensive and time consuming.
>
> Because we don't survey everyone in the population of interest, specific techniques are used to sample subsets of the population. Depending on how the sample is selected, the study results will differ if the same question is asked to different groups of people—even if they come from the same population of interest.

> **SAY:** To understand if data are discrepant you will need to know about the populations that the data came from you will need to know:
> - Who is in the study?
> - Where are they located?
> - How were they selected?
> - How do they compare with the greater population? Are they representative of the greater population?

Go to   **Slide 4: How are study samples selected?**

> **SAY:** To understand the answers to these questions we will talk a bit about different sampling techniques. There are two primary ways to sample a population. The first is probability sampling—the idea behind this type of sampling technique is that all cases are randomly selected. All eligible cases, or individuals, have the same chance of being chosen for a study.
>
> **ASK:** Why is it important that participants in a study are randomly chosen?

❏ Give the participants a moment to think and respond.

> **SAY:** As I said earlier, researchers rarely survey an entire population. It's just too expensive. But if we randomly select a small group of individuals within a population for our survey, we can often say that the results of our survey represent that larger population.
>
> Also, if survey respondents are chosen randomly, it may also be possible to generalize or infer our survey results to other population groups, points in time, or settings. For example, if I randomly chose students at one university, and my sample size was large enough to make a precise estimate, I may be able to say that my findings describe typical students at any university in the country.
>
> There are different types of probability sampling designs—such as simple random sampling, systematic sampling, stratified random sampling, and cluster sampling—that ensure random selection.
>
> **ASK:** Can I always randomly choose my participants in a study?

❏ Give the participants a moment to think and respond.

SAY: The second way to sample a population is non-probability sampling. This technique is used when you are not able to randomly select your survey participants. For example, you want to look at the behavior of men who have sex with men, but this population is not easy to find or quantify. Without being able to clearly define your population of interest, it will be challenging to randomly sample from it. The only way to find survey participants may be for the investigator to non-randomly select them. Another example is that you want to investigate client satisfaction with a particular service, but you don't have the funds to conduct a large-scale survey.

Other reasons to use non-probability sampling might be that 1) you want to do an exploratory study to direct future research, 2) you don't want to apply your findings to other populations, or 3) there are very few cases to investigate within a population. In these cases, you would use non-probability sampling methods such as availability or convenience sampling, purposive sampling, quota sampling, or snowball sampling.

The principal difference between probability and non-probability sampling is random selection. If you do not choose your sample participants randomly, then there is potential for what is called sample bias, or sample selection bias. This term means that the chances of selecting any case, or survey respondent, are not known. We therefore cannot say with certainty that the individuals within a survey, and the information they provide, represents the characteristics of a larger population.

How do researchers decide what sampling technique to use? By looking at:
- the desired level of confidence or accuracy in the results;
- the characteristics of the population of interest;
- the budget, timeline, and capacity of research staff; and
- the type of research question.

When I say "the type of research question," I mean that sometimes you want to know the size and scope of a problem or you want to prove the existence of a relationship. In this case, a quantitative survey using a probability sampling design may be more appropriate.

However, you may choose to conduct qualitative research using a non-probability sampling design if your goal is to 1) explore more sensitive topics in depth, 2) generate understanding of an issue from the perspective and language of informants, or 3) answer research questions that start with how, what, and why. A qualitative approach provides a description of the research topic in the language of the informant. Of course, the best of both worlds is mixed-methods research where an investigator uses multiple research methods and sampling techniques to learn about a specific phenomenon. Results from mixed-methods research are often both very reliable and very useful for making programmatic decisions.

SAY: Now that we have reviewed the basics of sampling, let's go back to our example on HIV prevalence estimates from ANC surveillance and the DHS. In the first column you see the questions we can ask to help understand the differences between our samples.

We first look at row 1: *Who is in the study?* The DHS includes men and women of reproductive age while the ANC surveillance system includes only women who are pregnant. As you see, these populations are not equal. So we look at the second row: *How do they compare?*

Because the DHS includes both men and women of reproductive age, some of them will be sexually active and some will not. In the ANC sample, all of these women were sexually active. Moreover, in the DHS sample, some of these individuals are most likely using contraception, including condoms, whereas in the ANC sample, we know that none of the women used condoms. Most likely there are other differences, but these are the biggest. This tells us that exposure to HIV was most likely higher in the ANC sample.

Now let's look at the third row: *How were they selected?* The DHS used a random sampling methodology, and the ANC used a purposive non-random sampling methodology. What does this mean? The DHS is more representative of the actual population than the surveillance data; however, there is an abiding assumption that trends in ANC sero-prevalence are a good proxy for trends in a sexually active population (ages 15–49). It is also important to note that sometimes ANC statistics are corrected to estimate the general population prevalence using modeling.

Understanding where the study respondents are located also helps us to understand the differences between the two samples. In the last row you see that the ANC study sampled 30 sites out of 372 health centers: 2 in the capital, 12 in other urban areas, and 16 rural sites. This does not represent the entire population. Also when it comes to sampling at facilities as opposed to the home, you cannot be certain if the clients who frequent the facility are actually from that geographic location. Sometimes urban facilities serve clients from their surrounding rural areas.

ASK: So what does all of this mean for interpreting the two HIV estimates?

❑ Give the participants a moment to think and respond.

SAY: The ANC estimate is most likely overestimated.

ASK: Can you determine if it is either significantly or slightly overestimated?

❑ Give the participants a moment to think and respond.

> **SAY:** Most likely, the overestimation is slight because the ANC estimate is not very far off from the DHS which is a nationally representative sample.
>
> **ASK:** Which estimate should we use?

❑ Give the participants a moment to think and respond.

> **SAY:** Both should inform your decision making. The point here is that they are both strong methodologies even if the DHS is a random sample of the general population. It's important to remember that the difference between 4.1% and 6.4% is less that 2%. Programmatically there may not be much difference between what you would do in either situation. The point here is to understand the weakness of each approach. Even the best designed studies have potential methodological weaknesses.

NOTE TO FACILITATOR: There is usually a nationally recognized HIV prevalence figure for the adult population, and you may want to point that out to the audience.

Go to   **Slide 6: What contributes to data discrepancies?**

> **SAY:** Let's look at other possible contributors to discrepancies in data. A primary one is error in the data. There are two types of error associated with most forms of research: random and systematic.
>
> Random error can occur as either a random sampling error or a random measurement error. A random sampling error refers to a statistical calculation that tells you how precise or accurate an estimate is. It tells you how likely you would see the same results from a survey if you conducted that survey with everyone in the entire population. For example, a study may say that we are 95% certain that the prevalence of HIV in the population is 3%, plus or minus 2%. The range between 1% and 5% is due to sampling error. This range is also referred to as a confidence interval.
>
> This sampling error, or confidence interval, can be reduced with larger sample sizes. A small confidence interval indicates a very precise estimate. Random measurement errors are temporary, chance factors in the survey that can be caused by ambiguous items, fatigue, or recording errors. These errors tend to cancel each other out with repeated measurements.
>
> Systematic errors, or biases, are reproducible inaccuracies that create consistently false patterns of differences between observed and true values.

SAY: These errors differ from the true value by a constant amount. Most biases resulting from systematic errors cannot be reduced through statistics. This is because biases can arise from innumerable sources including complex human factors.

The most common categories of systematic measurement error that can affect the validity of research include the following:
- The reactive measurement effect occurs when a response is affected by the process of being observed (also known as the Hawthorne Effect).
- The social desirability effect occurs when people are less willing to admit socially undesirable positions when they are aware of being tested. This is the tendency of respondents to answer questions in a manner that will be viewed favorably by others. It can take the form of over-reporting good behavior or under-reporting bad behavior.
- The acquiescence response set occurs when respondents are more likely to agree than disagree with statements regardless of content.

Another source of systematic error is when not all of the appropriate variables, or factors, are used to define a concept or indicator. For example, you may have seen two estimates for a specific indicator, and yet they are two completely different numbers. The difference in the two estimates may not be caused by inaccurate data. It may be that you are not really looking at comparable indicators—EVEN if they are called the same thing. The point here is that sometimes two indicators or variables may have the same name, but they actually measure different things. Let's look at an example.

Go to   **Slide 7: 2 Studies—Same indicator**

SAY: A study was implemented to determine the feasibility of integrating family planning and HIV services. The research team collected data from facilities on the numbers of women who completed prevention of mother-to-child treatment, or PMTCT, services. Results of the study indicated extreme differences in the numbers of women completing services. These data were not consistent with other data in the country on PMTCT completion.

During the data interpretation phase of the study, the team discovered that the facility staff was not recording PMTCT data as recommended by the national health management information systems department.

Some facilities defined completed PMTCT services as counseling, testing, and giving test results to women. Others defined the indicator as counseling, testing, and giving test results to women as well as treating HIV-positive women and babies.

> **SAY:** The lack of precision and consistency in how completed PMTCT services were defined is what accounted for the extreme variation in the findings and lack of agreement with other similar data sources. It is important to understand if the two indicators that you find to be discrepant are actually measuring the same phenomenon.
>
> Now let's consider terminology as a potential reason for data discrepancies. I will also explain this point through an example.

Go to   **Slide 8: What contributes to data discrepancies?**

> **SAY:** In 2010, two studies were conducted on HIV among female commercial sex workers or FCSWs. The first study is the *2010 Behavioral Surveillance Survey* which consisted of a nationally representative sample of 1,338 FCSWs. One of the objectives of the study was to determine the prevalence of HIV among FCSWs. The study found the overall prevalence to be 51%.
>
> The next study is the *High Burden of Prevalent and Recently Acquired HIV among Female Sex Workers and Female HIV Voluntary Testing Center Clients in Kigali, Rwanda* by Braunstein et al. This study was also conducted in 2010 and was a cross-sectional survey of 800 FCSWs. One of the objectives of this study was to also estimate HIV prevalence. It found an HIV prevalence of 24%.
>
> The difference between 51% and 24% is significant.
>
> **ASK:** Without considering anything else about either study, can anyone tell me what may have caused this difference?

❑   Give the participants a moment to think and respond.

> **SAY:** From the title we see that this study was looking at:
> - prevalence,
> - incidence or those recently acquiring HIV,
> - non-gender-specific sex workers, and
> - HIV- positive females at voluntary counseling and testing clinics.
>
> The study covered a lot of different information which created a lot of potential for error. So it important to read the methods section of the study. It is also good to know what prevalence is. *Prevalence* measures all of the individuals who have the disease that exist at a given moment. Another term *incidence* measures only newly occurring cases. Upon further investigation into the methods section, I discovered that indeed they measured only new infections among sex workers.

> **SAY:** They screened out all HIV-positive women who had been infected for some time. Therefore, the wrong terminology is used here. The researchers should have reported the results as *incidence*. So, this is not really a discrepancy in the data, but at first look it appeared as one.
>
> These details are confusing. It is important to probe to understand what you are looking at. As we can see, there are many things that can cause discrepancies—real or perceived—in data.
>
> **ASK:** The question now is, what can help you to interpret these types of data?

❑ Give the participants a moment to think and respond.

NOTE TO FACILITATOR: Participants may suggest that the difference is due to different sampling methodologies between BSS and the Braunstein study. This is true, but the primary issue with this study is that they excluded positive FCSWs in the Brauenstein study thereby reducing the prevalence.

Go to   **Slide 9: What contributes to data discrepancies?**

> **SAY:** Now we will discuss data quality.

Go to   **Slide 10: Dimensions of Data Quality**

> **SAY:** Many of the issues we have been discussing are related to the quality of the data. This chart summarizes some of those issues and addresses additional ones.
> • Validity looks at accuracy—that your methods are measuring what you intended to measure.
> • Reliability has to do with the consistency of the data. It is good to remember that a valid measure is always reliable. However a reliable measure may or may not be valid.
> • Completeness asks, are all data available? Are there a lot of missing data?
> • Precision means that all data have sufficient detail and definitions.
> • Timeliness means that data are up-to-date, or current, and the information reflects the program activities being assessed.
> • Integrity means that data are protected from deliberate bias or manipulation for political or personal reasons.
>
> These issues should be considered when assessing your data sources.

Go to   **Slide 11: Program Outcome Errors**

SAY: One final thought on types of errors to look out for. Often programs are evaluated to determine if the many interventions produce. an immediate and observable health impact that leads to longer term changes in health outcomes such as morbidity and mortality.

Such an evaluation, depending on the design of the study, is vulnerable to all of the errors that I have mentioned before. There are three broad categories to keep in mind when looking at a program evaluation. The first two are:
- a false positive—when a program was shown to have had an effect, but in reality it did not; and
- a false negative—when an evaluation failed to detect a true program effect.

Often to overcome these errors, a random selection of program participants and non-participants are used to compare program effects.

As I said earlier, random selection helps to ensure that the populations in the sample represent the greater population. It also allows statisticians to calculate an impact to within 90%, 95%, or 99% certainty.

A third type of error is an implementation error. There was no program effect found because not enough of the intervention was implemented or the implementation was not done correctly.

This error is often overcome by evaluating the implementation process and monitoring how the program was delivered. So if your impact evaluation shows no effect, it may be useful to look at how the program was implemented.

Ultimately an intervention is judged effective by:
- whether or not it produces individual change,
- the extent of the reach or penetration into the population of the intervention, and
- the sustainability of the change—how much time the effects of the change last.

Go to   Slide 12: What can help you interpret data discrepancies?

SAY: Now that we've discussed the factors that can contribute to discrepant data, let's talk about what we can do to interpret the data. First is to probe: to ask questions and to investigate what could be causing the conflicting numbers. As we discussed, you can look at the populations being studied, the potential sources of bias, how indicators are defined, and other issues related to data quality. Another tool you can use is to look at the confidence intervals of the indicator of interest in both studies.

SAY: As I said in my earlier example, you may have an estimate like 3% prevalence, plus or minus 2%. That range of plus or minus 2% is the confidence interval. But how does a researcher know how wide of a range to use for the confidence interval?

Well you can use a statistical calculation to say that a certain estimate will occur within a given range 90%, 95%, or even 99% of the time. This is the amount of uncertainty associated with a specific measurement. The most common confidence interval around an estimate is when a researcher is 95% confident in the results.

So your confidence interval is your margin of error, or the amount you expect the results to vary given a certain percentage of the time.

This can help you to interpret discrepant data from two different studies by asking yourself, what is the size of the confidence interval and do they overlap? Let's look at an example.

Go to   Slide 13: Confidence intervals

SAY: Here you have two studies, study A and study B. Study A found that 53% of women reported multiple partners, and study B found that 61% of women reported multiple partners. Is this difference significant? Yes—the end ranges of each confidence interval do not overlap.

Now, let's slightly change our example so that the confidence intervals are wider, meaning the range of the confidence interval is greater.

Go to   Slide 14: Confidence intervals

SAY: Here I've changed the confidence intervals so that it is now 48–58% for study A and 57–65% for study B. So our confidence intervals are wider—meaning the margin of error in both studies was greater—and the intervals would overlap. This means that our margin of error is in both studies is wide enough that the estimates from each study could be found within the other study's confidence interval. This suggests that the difference between the two studies is not significant.

It's important to remember that we not only look at confidence intervals, but also at all of the other issues that we've discussed. This is just a researcher's rule of thumb. One thing to always remember when interpreting data is to use common sense. The finding of non-use of condoms with high-risk partners at 53% or 61% is simply too high, and intervention is needed.

> **SAY:** My last point on confidence intervals is that they are only calculated and reported when a random sampling technique is used. If the samples were not randomly selected, then there will be no confidence intervals to compare.

Go to   **Slide 15: What can help you interpret data discrepancies?**

> **SAY:** Let's go back to our slide on the techniques you can use to interpret data discrepancies. In addition to investigating sampling approaches, error, indicator definitions, terminology, data quality, and confidence intervals, what else can you do?
>
> You can always reference additional studies that looked at the same variables. More evidence with similar estimates gives you a stronger indication that the results are accurate.
>
> Lastly, what else can you do to if you are struggling to decipher the difference between two studies? You can ask an expert. A statistician can help you to understand the differences between methodologies and the nuances between some of the statistical approaches applied to studies. They are an invaluable resource to the decision-making process.

Go to   **Slide 16: Small Group Exercise: Data Discrepancies**

> **SAY:** Now we would like to do a small group exercise where each group will read about two different sets of data: the *2005 Demographic Health Survey*, or DHS and the *2005 Priorities for Local AIDS Control Efforts*, or PLACE, assessment.
>
> In your handout packet you will find a brief description of both studies as well as six tables comparing data from both studies. We will give you 20 minutes for each of you to read through the handout and discuss the two studies.

Go to   **Slide 17: Small Group Exercise: Data Discrepancies**

> **SAY:** While you are discussing in your groups. Think about answers to the following questions:
> * Who is in the study?
> * Where are they located?
> * How were they selected?
> * How does each study group compare to the greater population?
> * How are the two studies different?
> * What is the use of each type of data for program planners? policymakers?

> **SAY:** After 20 minutes, we will go around and have each group provide an answer to one question. We will discuss each group's answer—whether we all agree or disagree and why.
>
> **ASK:** Are there any questions?

❏ Give the participants a moment to think and respond.

NOTE TO FACILITATOR: Circulate throughout the groups and help guide them in their interpretation of the data.

Slide 18: Small Group Exercise: Data Discrepancies

> **ASK:** Who is in the study?

❏ Give the participants a moment to think and respond.

> **SAY**
> * Both DHS and PLACE:
>   » sampled men and women of reproductive age (15 to 49 years); and
>   » had population samples from rural, semi-urban, and urban areas.
> * DHS: Tables 1a and 1b:
>   » had a larger sample size of females,
>   » on average consisted of an older population, and
>   » were more likely to be married or living with a partner.
> * PLACE: Tables 1a and 1b:
>   » had a larger sample size of males,
>   » on average consisted of a younger population, and
>   » were less likely to be married or living with a partner.
>
> **ASK:** Where are they located?

❏ Give the participants a moment to think and respond.

> **SAY**
> * Both DHS and PLACE were implemented in 12 provinces.
> * DHS conducted a national household survey.
> * PLACE conducted a survey where local stakeholders perceived the highest acquisition and transmission of HIV was likely to occur (the 23 priority prevention areas, or PPAs)
>
> **ASK:** How were they selected?

❑ Give the participants a moment to think and respond.

> **SAY**
> - DHS used a two-stage cluster survey which is a probability sampling technique that involves random selection.
> - PLACE combined non-probability and probability sampling:
>   » It conducted key-informant interviews within PPA to identify a list of public venues where people met new sexual partners.
>   » A random selection of venues was taken from a list with greater probability given to larger venues.
>
> **ASK:** How does each study group compare to the greater population?

❑ Give the participants a moment to think and respond.

> **SAY**
> - For DHS, survey respondents were selected randomly; therefore, the information reflects the general population. Also, a two-stage cluster design limits how applicable the findings are at the household level, that is, the results describe more national trends.
> - For PLACE, the PLACE methodology targets specific sites where people meet sexual partners or where HIV transmission is more likely to occur. Also, the information is gathered directly from targeted areas and therefore the findings reflect more the population within those specified locations.
>
> **ASK:** How is the data in the two studies different?

❑ Give the participants a moment to think and respond.

> **SAY:** Refer to tables 3a, 3b, 4a, and 4b.
> - In DHS, for both males and females, the population is less likely to:
>   » have had sex with two or more partners in the past 12 months;
>   » have had sex with a non-marital or non-cohabitating partner in the past 12 months, and
>   » have used a condom at last sex in the past 12 months.
> - With PLACE, for both males and females, the population is more likely to:
>   » have had sex with two or more partners in the past 12 months,
>   » have had sex with a non-marital or non-cohabitating partner in the past 12 months, and
>   » have used a condom at last sex in the past 12 months.
>
> **ASK:** What is the use of each type of data for program planners? For policy-makers?

SAY

- PLACE provides a more local picture: national surveys like the DHS mask the diversity in local epidemic contexts and provide limited insight into where high levels of sexual partnership may occur. HIV prevention programs could benefit from greater understanding of the determinants of local epidemics in high-transmission areas.

- PLACE population is high-risk in that the PLACE population is more likely to have higher rates of partner acquisition than the DHS population, and is more likely to have sex with non-marital or non-cohabitating partners, suggesting that the PLACE population is more likely to acquire and transmit HIV.

- PLACE is relevant to programs in that it identifies sites where people are likely to meet new sex partners. This information is useful at the program level because it can be used to target locations for prevention and testing activities.

- DHS and PLACE offer views on knowledge, attitudes, and practices at different levels of resolution: DHS at the national and regional level, PLACE at the local level.

- The advantages of DHS are that it provides an update on the scope of the epidemic and progress towards eliminating HIV within the entire country. It also can highlight regions where further prevention efforts are needed.

- The advantages of PLACE are that it provides further local insight on the scope of the epidemic at venues where there is a greater likelihood of HIV transmission. It can therefore be used to target prevention efforts and track progress towards eliminating HIV at the local level.

- In conclusion, it is not the case that the PLACE study is better than the DHS study or vice versa. They can be used together, the DHS to make decisions concerning national progress towards fighting HIV and what the focus regions are, and PLACE to make decisions about targeting prevention interventions at the local level.

END—Part 2: Understanding Data Discrepancies

Session 5 Identifying Opportunities and Barriers for Improving Data Use

SESSION OVERVIEW	
Duration	4 hours, 15 minutes
Purpose	Introduce tools to help the participants identify why data isn't used and what they can do about it in order to achieve their DDU goals
Learning Objectives	By the end of this session, participants will be able to: • identify the determinants of data use, • understand the barriers to data use in their contexts, • explore root causes of barriers, and • plan to overcome barriers and reach DDU goals.
Preparations	• Read through the facilitator notes for this session • Prepare copies of all handouts • Prepare the required flipcharts— session objectives • Capture notes from day-two exercise and write the teams' questions on individual flipchart pages
Materials	• Flipcharts—easel and paper • Markers • Handouts • Tape
Handouts	• The Main Determinants of Data Demand and Use • Fishbone Diagram • Team Action Plan to Address Barriers to Data Use
Note to Facilitator	A script is also found on the notes pages of the Power Point slides

START—Session 5

Slide 1: Identifying Barriers & Opportunities for Improving Data Use

> **SAY:** In Session 5, we are going to discuss the determinants of data use and the potential barriers that affect them.

Slide 2: Session 5: Learning Objectives

> **SAY:** By the end of this session, you will be able to:
> - explain the determinants that affect data use,
> - list potential barriers to data use, and
> - convert barriers to challenges and develop action plans to overcome the challenges.

Slide 3: Session Overview

> **SAY:** Specifically, we will:
> - discuss the determinants of data use;
> - conduct a small group activity that will assess the barriers to data use;
> - identify the root causes of those barriers; and
> - create an action plan to:
>   » overcome those root causes or challenges to data use, and
>   » guide the use of data in decision making for your organization.

Slide 4: Data Demand & Use

> **SAY:** In day one of our workshop, we discussed the key elements of the decision-making context as the interaction of stakeholders, data, and decisions. We talked about how leadership and management practices can be applied to ensure that these three elements function together in a process that supports a vision of improved data use. We discussed some tools that can be applied to facilitate the leadership of improved data use.
>
> All of these strategies and tools that we have discussed will bring us closer to a functioning cycle of regular data-informed decision making. The framework you see on this slide depicts a cycle from data demand to use that we are striving for. Embedded in the cycle is the decision-making process.

SAY: The overarching principle of the framework is that evidence-based decision making will promote the achievement of improved health outcomes. Let's start at the bottom of the circle diagram. Data demand involves starting with our decisions—our information need. Here we have stakeholders actively and openly requesting quality, health-related data and information.

The next box at the left side of the diagram—data collection—represents the response to the demand for data. Information is sought to inform the data gap. This could be data from RHIS or the initiation of a new research study.

The next box at the top of the diagram shows the availability of the newly collected data. Here data are transformed into a format that can be easily understood by the user and disseminated to the end user. This is where data is transformed into information and shared—data analysis, interpretation, synthesis, and dissemination.

Last, the box at the right side of the diagram—utilization—represents the use of information in the decision-making process. This is when a decision maker reviews data to inform the development of a strategic plan, make program changes, or initiate a new policy.

You will note that the cycle then continues on back to data demand. As decision makers gain positive experiences using data, they will be more likely to demand it in the future to inform their decisions thereby reinforcing the cycle and creating a culture of data use.

It is important to note that this cycle represents the ideal. MANY things affect its proper functioning.

SAY: Understanding what can affect or inhibit the functioning of the data-use cycle is very important. There are three main determinants of data use. We define *determinant* as a causal element or factor directly linked to data use. The three determinants highlighted are *organizational*, *technical*, and *behavioral*. These three elements can either facilitate or hinder the use of information in decision making. Let's consider why this happens.

Here you see the organizational, technical, and behavioral factors that affect data use in decision making. Let's take a more in-depth look at each of these determinants.

SAY: *Technical determinants* refers to the technical aspects of data collection such as the processes, tools, forms, infrastructure, and staff capacity in M&E tasks. For example, the following are critical to ensuring data use:
- skills such as data analysis or computer literacy,
- the presence of key M&E infrastructure such as computers, and
- the soundness of data systems that are the foundation of data-informed decision making. For example indicators need to be relevant and well defined for use. Data quality assurance protocols also need to be in place. Without these, stakeholders won't trust them and therefore won't want to use them.

When we think about what affects the use of information, most of us think of issues in this this technical category of determinants of data use.

Go to   Slide 7: Organizational Determinants

SAY: *Organizational determinants* relates to the organizational supports that contribute to data collection, availability, and use. Overall, as we have stressed in this workshop, having good leaders at all levels of the organization is key to ensuring that staff take responsibility for overcoming challenges and enabling the achievement of team results. Other examples of organizational supports include:
- a monitoring and evaluation plan linked to a program plan, with clear targets and desired increases, which is regularly reviewed;
- a mission statement, vision, or strategic plan that seeks to achieve data-informed decision making;
- organizational policies or procedures for data use, data management, data quality, or data sharing;
- guidelines for registering new research;
- clear roles and responsibilities of those who collect, analyze, disseminate, and use data; and
- regular forums or meetings scheduled and implemented for data-user and data-producer interactions.

These types of organizational supports greatly affect the use of information, yet they are not often considered when working to improve data demand and use.

Go to   Slide 8: Behavioral Determinants

SAY: Lastly, *behavioral determinants* refers to the behavior of individuals who produce and use data. This would cover the skills, attitudes, values, and motivation of individuals within an organization.

> **SAY:** The following play a big role in determining if data and information are used:
> - The attitude of decision makers—if decision makers have no interest in using data, they will make decisions based on other factors.
> - Staff motivation to collect quality data, analyze the data, and use them.
> - The lack of a data culture—by a culture we mean an environment where everyone 1) understands their role in the data-use process, 2) values this role, and 3) works to support the functioning of a data-use culture.

Go to   **Slide 9: What Determines Data Demand & Use?**

> **SAY:** In addition to organizational, technical, and behavioral determinants, we also need to consider the external environment—the political, cultural, and social factors that affect the demand for and use of data. While these factors are not necessarily areas that can be affected or changed, it is still important to understand their impact on the use of information in decision making.
>
> Ideally, an assessment of these areas would be conducted when developing a strategy to improve data use. This assessment will help you to identify the barriers to data use in your organization. Depending on the time and budget available for this kind of assessment, you can do a full assessment of the health information system using a tool that MEASURE Evaluation has produced called the *Performance of Routine Information Systems Management,* or PRISM, tool.
>
> Or you can do a more rapid, although less comprehensive and rigorous, assessment using another MEASURE Evaluation tool called the *Rapid Assessment of Constraints to Data Use*. Both of these tools can be found in your course materials or on the MEASURE website.

Go to   **Slide 10: Open Discussion**

❑ Refer to the prepared flipcharts that display the teams' programmatic and policy questions that we developed in session 4.

> **SAY:** Let's look back at the programmatic and policy questions we developed yesterday. These are things we need to know about the work we do. We should ask ourselves why we don't already have the answers.
>
> **ASK:** What is blocking the way to the answer—what are the obstacles?
>
> **SAY:** Let's take a moment to broadly discuss the types of barriers you have experienced in using information or getting others in your organizations to use data in order to make decisions.

□ **Engage participants:** Encourage participants to contribute to the question. Get feedback from approximately three people. Record the participant responses on a flipchart. Ask how they overcame the barriers. If they have yet to overcome them, ask for suggestions about overcoming them. Point out any commonalities among the responses.

ACTIVITY 1   **IDENTIFY THE BARRIERS TO DATA USE**

Purpose
To explore common barriers to the use of data.

Duration
45 minutes

Process

Step 1: Identify obstacles to reaching the result

Go to   **Slide 11: Small Group Activity**

> **SAY:** Now that we have introduced the concept of identifying our barriers to using data in decision making, let's take some time to engage our groups and really identify what is blocking our use of data in each of our specific work environments. In this next group exercise, we are going to build on the discussion we just had. We are going to spend about 30 minutes of group work discussing the barriers to data use that you are currently experiencing in your work settings. We will then have 15 minutes to share results of the group discussions.
>
> The questions you see on this slide may help to spark your discussion. They are based on questions found in the *Rapid Assessment of Constraints to Data Use* tool. You can also refer to handout in your packet which summarizes the three determinants of data use. By organizing your discussion around each of the determinant areas, you will be sure to get a comprehensive snapshot of the barriers you face.
>
> These details are confusing. It is important to probe to understand what you are looking at.

NOTE TO FACILITATOR: Read through the slide. Divide the participants into small groups. Hand out copies of *The Main Determinants of Data Demand and Use* to guide the group discussion.

Step 2: Share the results (15 minutes)

Step 3: Look for commonalities among the groups

Purpose

Introduce the leader's perspective that barriers must be overcome in order for the team to achieve results.

Duration

20 minutes

Process

Step 1: Converting Barriers to Challenges

> **SAY:** Do you have a picture of what a barrier looks like—a high wall, a gate, a ravine? What tends to happen in real life when you reach a barrier or obstacle? You stop, right? You HAVE to stop or hurt yourself.
>
> Think about a barrier or problem you are facing in your personal life currently. Something that is standing in the way of achieving a current goal. It may be one related to limited financial resources, separation from someone or something, ill health, or to something else.
>
> **ASK:** How does it make you feel to think about this barrier?

❑ Take responses from a few participants. Usually the responses are "hopeless," "worried," "sad," "not in control," etc.

❑ Point out that we usually think of barriers as solid and not within our control: they are external to us, and we have no responsibility for them. We can't do anything about them, and we are just stuck and cannot move forward.

> **SAY:** The leader's role in DDU is to recognize the barriers to DDU and find a way, with his or her team, to overcome them. Think of something you have accomplished that you are proud of and that required you to overcome one or more barriers.
>
> Turn to your neighbor. Tell him or her your story. Partners, listen without asking questions. After you are done, switch roles.
>
> **ASK:** Did anyone notice that there was a shift from seeing a situation as an external barrier, and maybe for someone else to deal with, to seeing it as something they could take steps to overcome?

❑ Collect a few comments. Ask 3–5 participants to share their stories. Ask the group what commonalities they heard and how the participants felt before they took action and after. How do they feel now about what happened? Are they proud of what they did? Did they learn something?

❑ The responses you should expect to hear are that the participants who shared their stories were determined, they took charge, they didn't let anything stop them, and they were creative in how they acted to overcome the barriers.

❑ Point out that they took personal responsibility for overcoming the barrier and turned it into a challenge. They were not going to let anyone or anything stop them from achieving their goal and took action to address the issue. They transformed a potential loss to a win and probably feel proud of themselves for accomplishing this.

SAY: For DDU leaders, identifying the barriers to data use requires the use of the leadership practice of scanning. A DDU leader scans the environment to understand where the barriers are internally in his or her department, organization, or institution as well as where the barriers are externally.

But how do they lead their team members to overcome those barriers? It will take all of the personal characteristics that you all have just mentioned, and it will also take applying the leadership practice of focusing.

ACTIVITY 3   DIAGNOSING ROOT CAUSES—THE FISHBONE AND FIVE WHYS TECHNIQUES

Purpose
This exercise helps participants to tell the difference between presenting symptoms and root causes and then to diagnose root causes.

Duration
60 minutes

Materials
• Prepared flipcharts: one with a tree with its roots showing and another with the fishbone diagram with each of the four *ribs*—organizational, technical, behavioral, and external environment—labeled
• Prepared flipchart with explanation of root-cause analysis: Root-cause analysis involves problem-solving methods that go beneath symptoms to find the basic causes of problems. We use root-cause analysis because problems are best solved by trying to correct or remove underlying causes, as opposed to merely dealing with obvious symptoms
• Handouts: *Fishbone Diagram*
• Blank flipcharts, one for each team

Process

Step 1: Introduce the *Fishbone Diagram* (15 minutes)

> **SAY:** Each group has identified a list of priority barriers within their organizations that prevent them from using data to make decisions on a routine basis. In order to come up with this list, each group looked at organizational, technical, and behavioral determinants, as well as the external environment.
>
> As leaders in your organizations, you need to transform these barriers into challenges to overcome them. But in order to do that, you need to understand the barriers and their root causes.
>
> The *Fishbone Diagram* is an easy way to gather these barriers into one place and under particular headings. This is the first step in breaking down barriers into their root causes.

❑ Complete the *Fishbone Diagram* with the specific barriers the teams identified earlier to show them how to use the diagram.

Step 2: Introduce techniques for root-cause analysis (30 minutes)

> **SAY:** What typically happens is that this is as far as we get. We see the obstacles and acknowledge the obstacles, but we don't dig any deeper to understand them better.

❑ Show the flipchart with the tree drawn on it.

> **SAY:** What tends to happen is that we see the symptoms and not the root causes. Looking at this tree we might say that we see the leaves of the tree turning brown and withering, but we don't look down to the roots to see if the tree is getting the nutrients it needs.
>
> Root-cause analysis involves problem-solving methods that go beneath symptoms to find the basic causes of problems. We use root-cause analysis because problems are best solved by trying to correct or remove underlying causes as opposed to merely dealing with obvious symptoms.
>
> Like a doctor diagnosing a patient, one way to identify root causes is to keep asking *Why?* in order to get beneath the symptoms and learn what causes them.

❑ Write on a separate flipchart—one under the other: Why? Why? Why? Why? Why?

❑ Give an example of how these whys are applied to the obstacles shown on the *Fishbone Diagram*. Select a barrier.

> **ASK:** Why is this happening?—or, why does this situation exist?

❑ Repeat the question after each response to illustrate the technique.

> **SAY:** It is important to stop at a why that is within your sphere of control or influence. You need to be clear that you can do something about the root cause of the barrier that you choose.

❑ Ask for questions and check for understanding.

❑ For further practice, ask each team to select 1–2 barriers from the list. They should choose an obstacle that would inhibit them from answering the question that they identified in Session 4 and included in their *Framework for Linking Data with Action*. If there are no obstacles to answering that specific question, then they should select the obstacle that would contribute most directly to general data-use activities in their settings.

❑ Ask the participants to work in their teams for about 15 minutes to apply the 5-Whys Technique to the obstacle they chose. When they have finished, have them write their 5 whys on a flipchart sheet.

NOTE TO FACILITATOR: Circulate among the teams with your co-facilitator to make sure you do not get a long list of vague descriptions, such as a lack of human resources. If you see this, help the teams analyze more deeply by asking why that is. When they are through, ask each team to present their 5 whys for discussion within the group. Provide constructive and positive feedback, guiding each team toward a better understanding of the technique and getting to a true root cause.

SPECIAL FACILITATOR NOTES on the 5-Whys Technique: This is a deceptive exercise in that it looks easy, and yet is difficult. Please note the following:

❑ People might want to know if they should always ask *why* five times. It is true that sometimes only three whys are enough? When to stop asking *why* depends on the answers. If they are not actionable or within the control of the team, it is better to move up to why answers that the team can do something about.

❑ Stress the importance of going beyond statements like "lack of resources" so the teams can reach a high quality of analysis.

❑ Many times the teams say that their root cause is a lack of funding. Often this is a smoke screen that allows them to dodge responsibility (as in, someone else is responsible because they haven't given us any money). One question to ask to redirect the team would be: if money were not an issue, what would the root cause be? Or ask them to start again and go down another why path to a root cause they can address. This is not to say that money might not be a root cause, and if the generation of funding through budget reallocation, advocacy, or development is within their control, you might want to let them chose this root cause. Lack of funding, however, is unlikely when the organization is funded by the national budget.

❑ There are any number of why paths that a team can go down. Make sure that they stay on a logical path (where each why is logically related to the prior why), and where they can have an impact through their own actions.

SAY: So your mandate as a leader in DDU is clear. It is up to you to be a manager who leads—someone who enables others to overcome obstacles and achieve results.

You now have a shared vision to inspire you and your team. You have scanned your environment to identify your information needs about your programs and identify the barriers that might stand in your way. And you have focused on the root causes of the barriers.

Now it is time to plan. Remember the other leadership and management practices as you develop your plans and ask yourselves:
· Who do we need to align and mobilize?
· What resources do we need? How should we organize our resources?
· What is the best way to implement our plan?
· How will we monitor and evaluate our activities and final success?

ACTIVITY 4   **DEVELOPING ACTION PLANS TO ADDRESS CHALLENGES TO DATA USE**

Duration
1 hour, 30 minutes

Process

❑ Hand out *Team Action Plan to Address Barriers to Data Use*

SAY: Please take a look at the *Team Action Plan to Address Barriers to Data Use* template that we have provided for you. It starts with your group's vision, or dream of a desired future, as leaders. In the first box, we list one of the root causes to data use that your group has identified, except now it is written as a challenge to overcome.

SAY: For example, let's say your group chooses to focus on the following barrier to data use: that routine data is not regularly analyzed or presented at annual managerial meetings. After implementing the 5-Whys Technique, you might discover that the root cause of this barrier is that staff lack technical training in data analysis. This root cause can now be restated as a challenge: how can we ensure that staffs are trained in data analysis, and they present at annual managerial meetings to inform decision making?

Your group can then ask: what do we need to do first to overcome this challenge? What do we need to do next? Be precise. Conduct a training, for example, is a very broad, unfocused activity. You might have to develop curriculum, obtain approvals from others in the organization, identify participants, arrange the logistics and training calendar, etc. Each of these is a separate activity that is listed under the challenge.

In the next two columns, we have the name of the person responsibly for ensuring that the task gets completed, and we have the expected start and completion dates. The name represents one of your team members who agrees to coordinate this activity. It does not mean that that person is responsible for doing the task all by himself or herself. Please only put the name of a team member who agrees to take on that responsibility.

In the next column, you will list the resources needed. This might include the names of people in the various organizations who need to be involved to provide information or support to the team. It might also include time, funds, facilities (like a meeting room), photocopies, etc.

In the last column, is a checklist for activity completion to see if you are on track to overcoming this challenge to data use.

After all activities are listed, it is helpful to create an overall indicator of success that brings together all activities into one specific objective that, if met, will overcome the challenge to routine data use. This indicator of success should be time-bound and be completed either between Module 1 and Module 2 (if you choose to include Module 2) or a certain period after Module 1. The indicator or success will be used by the facilitators as a guide for the coaching sessions after this workshop.

❑ Briefly review the *Team Action Plan to Address Barriers to Data Use* to ensure that there is understanding about what information goes in each column.

SAY: Now I ask that each team fill out the blank template that we handed out. The objective of this next exercise is to bring together all of these elements of the work you have done over the past three days and to focus on how you will address your challenges over the next six weeks.

❑ As the teams work, move among them to ensure that they understand how to complete the template, that their plans are clear and actionable, and that they directly address the root cause of the data-use barrier they have identified. Make sure they understand that team meetings should be conducted on a regular basis during the implementation period. They should also be completing tasks, accomplishing intermediate results, and reporting this progress to their coach regularly.

❑ Reinforce the leadership and management practices.

> **ASK:** What scanning will you have to do? How will you focus your research? Who needs to be aligned? Do they also need to be mobilized? How will you inspire each other and the other people you will be working with? Etc.

❑ Report out.

❑ After one hour, ask the teams to take turns presenting their plans and soliciting suggestions from the group about how to strengthen their plans (30 minutes to present and incorporate suggested changes).

❑ Make substantive and constructive comments.

> **SAY:** So your mandate as a leader in DDU is clear. It is up to you to be a manager who leads—someone who enables others to overcome obstacles and achieve results.

END—Session 5

Session 6   Culture Change and Change Management

SESSION OVERVIEW	
Duration	1 hour
Purpose	• Introduce *change culture*—the idea that change occurs when action plans and DDU plans are implemented • Introduce Kotter's theory of change management
Learning Objectives	By the end of this session, the participants will know: • the impact of change processes on culture • the principles of change management • how to avoid common pitfalls in implementing change
Preparations	• Read through the facilitator notes for this session • Prepare copies of all handouts • Prepare the required flipcharts, including: "Leaders establish the vision for the future and set the strategy for getting there; they cause change. They motivate and inspire others to go in the right direction and they, along with everyone else, sacrifice to get there."—John Kotter
Handouts	• John Kotter's "Stages of Successful Change Process" Model • Implementation Plan Analysis
Note to Facilitator	A script is also found on the notes pages of the Power Point slides

START—Session 6

Introduction
- How are change processes also culture change?
- Successfully managing change

Objectives
❑ Referring to the prepared flipchart or slide, present session objectives (see Learning Objectives on the previous page).

ACTIVITY 1   **CHANGE PROCESSES AND CULTURE CHANGE**

Purpose
Demonstrate that leaders are change agents and that any change process is fundamentally a culture change.

Duration
30 minutes

SAY: Over the course of the past three days, you have learned new leadership practices and DDU techniques and tools. You have made action plans that you will implement as teams by applying the tools we have given you.

By the end of this session, you will know:
- the impact of change processes on culture,
- the principles of change management, and
- how to avoid common pitfalls in implementing change.

ASK: Briefly, what specific organizational or behavioral changes do you anticipate as a result of implementing your plans?

❑ Take responses from 4 or 5 participants.

SAY: When you go back to your everyday lives, you will be back in the midst of people who have not been introduced to the same leadership and DDU principals and techniques that you have.

> **ASK:** How do you think they might respond?

Typical answers are "angry," "scared," "confused," "eager" (to make the changes), "relieved" (that changes are finally being made, for example), etc.

> **SAY:** People have very different reactions to change—some are eager to affect change and others are frightened that it will have a negative impact on them. And then there are those who are habituated to the old ways of doing things and will say, We can't do that because we've always done it this way. Everyone has a different change style or receptivity to change.
>
> You are asking people to do something that they are not used to, and they will generally think about how it will affect them personally. Some see opportunity in change, some feel threatened, and others believe that the old way was good enough and don't see any reason or necessity to change.
>
> All of these people are part of an existing organizational culture that may or may not support change. Your job as leaders is to ensure that the change is accepted and successful.
>
> **ASK:** We've all experienced change in our lives—constant change! In your experience, when faced with a large change, what has made it easier for you?

❑ Take 6–10 brief responses. Ask the co-facilitator to write the responses on a flipchart.

❑ If you don't get the following answers, add them to what the participants have said:
  » frequent communication
  » clarity regarding the changes and the intent
  » a sense of the big picture/vision
  » having the opportunity to participate in change ideas and decisions
  » being able to take some personal responsibility for the change

> **SAY:** The most successful changes are those in which the stakeholders are engaged. Change can be forced on people, but what you get is short-term compliance, not commitment and long term productivity.

Go to   **Slide 4: Overcoming Resistance/Aligning and Mobilizing**

> **ASK:** What will you commit to doing, both individually and as a team, to overcome resistance and ensure success? What do you need to be prepared to do when you return to your offices to overcome resistance and align and mobilize the people who are important to the success of your plan?

❑ Ask the teams to discuss these questions at their tables and write down a list of three specific things they will commit to doing individually and three specific things they will commit to doing as a team to overcome resistance and align and mobilize the people who are important to the success of their plan.

❑ Give them 10 minutes to discuss and then ask them to report out.

ACTIVITY 2   **CHANGE MANAGEMENT**

Duration
30 minutes

Process

Step 1: Why change processes fail

> **SAY:** Let's look at what else it takes to manage change successfully. As you have seen, you cannot take change for granted. Change processes have a very high rate of failure and must be actively managed in order to ensure their success.
>
> According to John Kotter, a professor at the Harvard Business School in Cambridge, Massachusetts, and a recognized authority on leadership and change, there are some predictable reasons why change processes fail.

Go to   **Slide 5: Why Change Processes Fail**

❑ Hand out *John Kotter's Stages of Successful Change Model*

❑ Ask a different participant to read each one of the eight common causes of failure from the first page of the handout.

Go to   **Slide 6: Kotter's 8 Stages for Change**

Step 2: Steps to avoid failure

> **SAY:** This is quite a bit to worry about. Fortunately, Mr. Kotter has some suggestions about how to avoid these pitfalls.

> **SAY:** To help organizations avoid or alleviate the impact of the most common causes of change-process failure, Mr. Kotter proposes these eight steps that the change leader must take.

❑ Ask a different participant to read each one of the eight steps from the second and third pages of the handout.

Step 3: Applying Kotter's steps to the Action Plans

❑ Hand out *Implementation Plan Analysis*.

> **SAY:** This is a quick planning tool to remind you to take Kotter's steps into consideration as you implement your action plans. As you can see, it is designed to be used at almost any point in the change process, but it is especially effective if used from the very beginning.

❑ Assign one or two of the stages to each team.

❑ Ask the teams to agree on two things they could do as a team to address the stage(s) as they implement their action plan. Give them about 20 minutes to brainstorm.

❑ Ask them to present their findings to the group.

Go to   **Slide 7: Implementation plan analysis**

NOTE TO FACILITATOR: This slide is a place holder to remind you to talk about the handout. If you are given more time (at least 30 minutes), you can use it to facilitate the exercise described here.

> **SAY:** This is a quick planning tool to remind you to take Kotter's steps into consideration as you implement your action plans. As you can see, it is designed to be used at almost any point in the change process, but it is especially effective if used at the very beginning in order to launch the process well.

Exercise (30+ minutes)

❑ Ask the teams to use the *Implementation Plan Analysis* template and apply it to their action plans. They may or may not have anything to put into the first column, but they should complete the second one. Give them about 20 minutes to brainstorm and complete the template.

❑ Assign each team to take one or two steps and ask them to share with the group the actions that they feel need to be taken in that step.

> **SAY:** I just want to leave you with two thoughts. The first is that leadership and change go together.

❑ Display the quotation you wrote on the flipchart or use slide 8.

❑ Read the slide and emphasize the word *cause*.

> **SAY:** Causing change is part of a leader's job. The second is that leaders not only cause change, but they also manage change to ensure that the process is successful and the right results are achieved.

ACTIVITY 3   **COMING TO CONCLUSION**

Duration
30 minutes

Purpose
- Close the workshop with a summary and reflection
- Collect completed evaluations

Workshop Summary (15 minutes)

❑ Briefly review the key points of the workshop.

❑ Thank the participants for their attention and participation and ask each one of the participants to say something about the workshop—a concept or practice that they found particularly interesting or helpful, an acknowledgement of someone or some aspect of the program, the way that they will apply what they learned in the workshop in their places of work, etc.

Evaluation (15 minutes)

❑ Refer the participants to the final page in their notebooks and ask them to complete the anonymous evaluation and give it to the facilitator(s) before they leave.

❑ If you are offering a certificate of participation, you can give them their certificates as they hand you their evaluations.

END—Session 6

Glossary

Data flow
Data are often not used because of issues related to flow, or the way in which data is collected, compiled or aggregated, stored, analyzed, reported to other stakeholders, and routinely used as part of the day-to-day management of health system planning and delivery.

Data producers
Professionals who acquire and analyze health data and prepare them for distribution to audiences of users. These include M&E specialists, data clerks, or researchers.

Data users
Health professionals, policymakers, and other key health decision makers who use data to inform the design, implementation, monitoring, and improvement of health programs.

Individual determinants to data use
Refers to the behavior of individuals who produce and use data. This would cover their skills, attitudes, values, and motivation of individuals within an organization.

Intervention (or exposure) bias
Refers to whether enough intervention is delivered to the target population or whether the intervention is standardized across all subgroups of the target population. This error is often overcome by evaluating the implementation process and monitoring how the program was delivered. So if your impact evaluation shows no effect, it may be useful to look at how the program was implemented.

LEADERSHIP PRACTICES

Scanning
Identifying internal and external conditions that influence, positively or negatively, the current availability and use of data.

Focusing
Identifying priority questions and the data needs for answering the question.

Aligning and Mobilizing
Bringing data users and data producers together to review and use data. Also, uniting and motivating internal and external stakeholders to commit resources to support the use of data in decision-making.

Inspiring
Creating a climate of commitment and continuous improvement of data and its use in the decision making process.

MANAGEMENT PRACTICES

Planning
Preparing a set of activities, timelines, and accountabilities to meet data-use goals, and developing an action plan to answer the questions you have identified.

Organizing
Developing structures, systems, and processes to support your plan of action.

Implementing
Carrying out and adapting the plan of action while coordinating related activities.

Monitoring and Evaluating
Observing, examining, and assessing progress in the use of information in decision making.

Mission
A mission states why something exists. It answers the questions:
- What do we do?—function;
- For whom?—our clients;
- Why do we do it?—purpose; and
- How do we do it?—values.

MEASUREMENT ERROR

Systematic measurement error
Factors that systematically influence either the process or the concept being measured. Errors differ from the true value of a variable by a constant amount. This occurs, for example, when a respondent is sensitive to being observed, or they are aware of being tested.

Random measurement error
Temporary, chance factors such as ambiguous items in a survey, fatigue, or recording errors.

Non-probability sampling
When cases within a sample are NOT randomly selected. This can be a source of sample bias where the chances of selecting any case are not known because they are non-randomly selected. This sampling technique is used for exploratory studies when 1) it is not needed to generalize findings to other populations, settings, or times; 2) it is the only way to find cases (i.e., men who have sex with men or drug users), 3) the population contains only a few cases or limited resources, or 4) the population cannot be clearly defined. Examples of non-probability sampling designs include convenience sampling, purposive sampling, quota sampling, referral or network sampling, and snowball or chain referral sampling.

Organizational determinants of data use

Relates to the organizational context that supports data collection, availability, and use. Examples of organizational context include 1) operating procedures that support M&E tasks and 2) clear roles and responsibilities of those who collect, analyze, disseminate, and use data.

Probability Sampling

All cases in a sample are randomly selected, that is all eligible cases have the same chance of being chosen. It eliminates investigator bias in case selection and allows the use of statistics to measure the accuracy of a sample. This sampling technique is used when there is a need to generalize findings to other populations, places or settings, time, outcome measures, or similar interventions. Examples of probability sampling designs include a simple random sample, systematic sampling, stratified random sampling, or cluster sampling.

Reliability

The consistency of a measurement.

Sampling Error or Random Error

The amount that a sample statistic varies from the true population characteristic it estimates. Estimates are more precise with larger sample sizes.

Stakeholder

Anyone who has a stake, or interest, in your program. This includes government agencies, policymakers, funding agencies, implementers or providers as stakeholders, beneficiaries or health programs/civil society as stakeholders, and data users and data producers.

Technical determinants of data use

Refers to the technical aspects of data collection such as data collection processes, tools, forms, infrastructure, and staff capacity in M&E tasks.

Validity

The accuracy or precision of a measurement.

Vision

A picture of a desired future. It describes where the team or the organization wants to be in the future and what impact it wishes to have. It includes an image that you can see in your mind. Think of it as a dream—something that is almost unimaginable and unattainable—that results from your actions.

Workgroup climate

The prevailing workplace atmosphere as experienced by the employees. It is what it feels like to work in the group.

Appendix 1: Module 1 Evaluation Questionnaire

1a. Please check the learning objectives for the course that you feel were fully met.

❑ Raise awareness of the importance of data in decision making.
❑ Define the role of leadership in promoting sustainable data use.
❑ Build individual and team capacity to apply DDU concepts, approaches, and tools. Promote and sustain them through strong leadership.
❑ Develop and implement specific plans to overcome barriers to data use.

1b. For learning objectives that were not fully met, provide suggestions on what could be improved.

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2. How confident do you feel in applying the data demand and use technical content of this course? Circle one.

NOT Confident	Somewhat confident	Neutral	Confident	Highly Confident
1	2	3	4	5

3a. How useful were the course materials?

3b. Please rate the usefulness of the materials.

	NOT Useful	Somewhat Useful	Neutral	Useful	Highly Useful
Slides (as presented)	1	2	3	4	5
Data Demand and Use Exercises	1	2	3	4	5
Leadership Excercises	1	2	3	4	5

4. What was your most significant take away from this module?

5. What recommendations do you have for improving the module?

6a. Would you recommend this workshop to your colleagues? Circle one.

Not Recommended	Somewhat Recommended	Neutral	Recommended	Highly Recommended
1	2	3	4	5

6b. If yes, what people (specify in which positions or stages in their careers) do you think would benefit most from this training? Why?

[ ]

7. Will you commit to applying what you learned in the next six weeks as you implement your plans?

❑ Yes
❑ No

7a. If yes, what will it take you and your team to do this?

[ ]

7b. If no, what else would you and your team need in order to apply the approaches, tips, and tools that were covered today?

[ ]

8. Additional comments or suggestions?

Appendix 2: Program Evaluation

1.   What aspects of your teams' action plans where you able to accomplish?

2.   What aspect of your action plans did you revise or eliminate? What motivated the change?

3.   Which decision makers and/or other stakeholders identified in your action plan(s) were you able to meet with? What was their role in the decision or action taken based on the data?

4. **What program or policy question was the team able to answer after the analysis and interpretation of data?**

5. **What data sources were reviewed? Where there any data gaps identified?**

6. **Which root causes of the challenge to data use was your team able to address? What action steps did your team take to overcome each root cause? (Reference the *Team Action Plan to Address Challenges to Data Use*)**

7. What leading and managing practices and tools did you apply most regularly? What benefit to your team and organization did you see from doing so?

[ ]

8. Do you know of any changes to how your organization operates as result of having your team participate in the *Building Leadership for Data Demand and Use* program?

[ ]

9. What suggestions do you have for improving this program?

[ ]

Appendix 3: Coaching Guide for Data Demand and Use

Why is coaching important to ensure leadership development for data-informed decision making?

National efforts to strengthen health systems involve building the capacity of staff through training to produce quality and timely data that informs decisions about health service performance, program design, strategic planning, and policy development. However, when health professionals return to their place of work, they face many challenges such as competing priorities, lack of motivation or initiative, or other professional stresses. Coaching has been identified as a successful approach to supporting newly trained staff as they apply their new skills in work settings. The new skills related to this course include leadership and management practices as well as DDU tools and approaches. The goal of individual and team coaching for health professionals implementing a DDU intervention is to continue to grow their problem-solving skills to achieve their objectives. This on-going capacity building is as important as getting the job done.

What is coaching?

It is the act of working with another individual to create solutions to problems and reach goals.[*] In a standard training or management practice, it is common for the trainer or manager to tell people what to do and give instructions on how to do it. Coaching comes from a different perspective and is a tool that helps to promote the talent and capabilities of other people in order to attain results. In other words, coaching is a learning approach that helps people to expand their action capacity and possibilities, and it allows people to increase their professional effectiveness and personal satisfaction. These two approaches employ very different skills as summarized in the table below:

Traditional training/management actions	Coaching actions
Telling, directing, teaching	Inquiring and listening
Seeking external control	Facilitating self-control through delegation
Knowing all the answers	Looking for answers with others
Focusing on mistakes	Focusing on possibilities and celebrating learning

Coaching is premised on the belief that people want to develop their capabilities and want to achieve results. It is also predicated on the idea that the results we obtain are the consequence of the actions we undertake. When we modify our actions, we have learned new behaviors that lead to new results. Coaching constitutes a way of helping people change their behaviors and judgments. It is a process that allows for self-correction and self-development which leads to long-term performance excellence.

Coaching needs a certain foundation to be effective and that foundation must include mutual confidence and respect between the coach and the person/people being coached. You might call this mutual trust. It also requires that the person being coached has the freedom to say what they wish. This means that the coach comes into the relationship without an agenda other than to help the person/people being coached to find their own ways of changing their behavior to achieve results.

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* Cooper, L. (2008). *Business NLP for Dummies*. West Sussex, England: John Wiley & Sons.

What is coaching for Building Leadership for Data Demand and Use?

This coaching is designed to help an individual or team to create solutions to problems and reach goals. *Building Leadership for Data Demand and Use* workshops conducted by MEASURE Evaluation involve the application of specific tools to guide an organization's change towards a culture of data-use. These tools include:
• *Stakeholder Engagement Tool*
• *Information Use Map*
• *Assessment of Data Use Constraints*
• *Framework for Linking Data with Action*
• *Performance of Routine Information System Management (PRISM)*

These tools are available on the MEASURE Evaluation website: www.measureevaluation.org/ddu-toolkit.

Health professionals use these tools to develop management plans tailored to their specific data needs. However improving data use within an organization can take time and will require leadership at all levels. People have different levels of ability and commitment. There may be unforeseen obstacles that arise. A coach can challenge and guide health professionals through a process that changes their perspectives, reinforces the application of new skills, and supports them as they lead their teams to surmount new challenges to data use. This coaching guide is designed to assist ongoing capacity building of those who have attended a *Building Leadership for Data Demand and Use* workshop.

What are the goals of a *Building Leadership for Data Demand and Use* coach?
A coach can support this process by reinforcing the content of the program, helping teams and individuals identify and overcome challenges, and ensuring commitment to and sustainability of a culture of strong leadership and DDU. Some specific ways a coach can assist includ:
• building a relationship with the health professional around improving their leadership of the DDU function in their organization,
• reinforcing leadership and DDU skills as they apply them to the needs and interests of the health professional, and
• encouraging self-motivation and responsibility through positive feedback.

What are the skills of a *Building Leadership for Data Demand and Use* coach?

1. <u>Building rapport:</u> A coach takes the time to develop a relationship that is open, honest, and builds confidence to overcome challenges. At the start, health professionals may not feel comfortable revealing all of the barriers they face in their work. A coach overcomes this apprehension by starting with descriptive, open-ended questions that keep the health professional talking about his or her experiences. The coach restates key words or phrases to show they understand the health professional's perspective. As the relationship grows, the health professional will offer greater cooperation, begin to analyze their own data-use culture, and eventually recommend ways to improve data use for other health professionals.

2. <u>Active listening/inquiring:</u> A coach faces the speaker and is attentive to what is being said. They use verbal and non-verbal cues to demonstrate they are listening. They do not interrupt, but wait for a pause to ask a question. An effective coach is able to feel what the speaker says and also pays attention to what is NOT said. Good coaching questions take into consideration the context, feelings, interpretations, point of view, and experiences of the person/people being coached. They are based on a genuine interest on the part of the coach in order to help the person discover the answers to their own challenges.

3. <u>Open mind:</u> A coach lets the health professional focus on what is important for him or her and asks open-ended questions that help the coach find out more about what the health professional is thinking.

4. <u>Knows when to facilitate problem solving and when to offer solutions:</u> Most coaching involves asking questions and guiding others to develop their own solutions. However, there are times when a health professional may not have access or be aware of other possibilities. If necessary, coaches can share their knowledge and experience in order to brainstorm a variety of options to overcome specific challenges. They can also direct the health professional to additional information sources. Coaches may offer some solutions, but their ultimate goal is get health professionals to a state where they are confident to act on their own.

5. <u>Feedback:</u> One of the primary purposes of feedback is to provide positive reinforcement to build confidence. Some tips on providing effective feedback include:
   » setting an appropriate time and place to talk;
   » being specific about the behavior that you appreciated or you were bothered by;
   » sticking to facts rather than generalizations; ("On Monday and Tuesday afternoons you did xyz" rather than "you always (never) do abc.")
   » describing the impact (positive or negative) that the behavior had on you, the team, or the organization;
   » expressing your feelings without blaming the other person for them;
   » giving the other person an opportunity to express his or her point of view, feelings, or difficulties; and
   » making a specific request for a different behavior when an action or behavior has a negative effect.

6. <u>Agreements and commitments:</u> In the course of the coaching, the coach needs to ask for commitments. If the person being coached says that they plan to change the DDU policy and procedures manual, the coach might ask when they will have it finalized.

What are good coaching questions?

Good coaching questions have the following characteristics:
1. They are open-ended rather than yes/no questions. This means that you would ask a question like, "How is the project going?" rather than "Is the project going well?"
2. They are true inquiries rather than veiled demands. For example, you would ask, "How do you want to handle this situation?" rather than "Don't you think you should have done this differently?"
3. They do not start with the word why as in, "Why did you do that?" Better questions might be, "How did that happen?" or "What do you think was going on?"

In this table there is a list of questions that lead to greater learning and examples of inquiry that blocks learning:

Inquiry that encourages learning	Inquiry that blocks learning
How do you see this differently?	Don't you think…? (especially when asked in an intimidating manner)
What's your reaction to…?	Did you do that because of X, Y, and Z?
What led you to that conclusion?	Do you really think you did a good job? (when the coach clearly thinks that he/she didn't)
Could you say more about that?	Why don't you just try what I'm suggesting?
What makes you…?	Why are you so defensive?
What kept you from telling me?	Why didn't you tell me?
How do you think you contributed to that?	Why did you do that?
How can you (achieve, change, etc)?	What's the matter with you?

Source: Management Sciences for Health 2005

Inquiry is also necessary for understanding and clarification. To ensure that the coach truly understands what the other person is saying, he/she might say, "If I understood correctly, are you saying…?", "I don't understand what you are saying, could you put it another way that would help me understand?", or "My sense from what you said is that you believe that …is that correct?"

What are coaching activities?

1. At the end of a workshop, establish the most effective communication method with trainees and a regular schedule for coaching sessions.
2. Review workshop content before initiating the first coaching session in order to be familiar with the health professional's knowledge of DDU tools.
3. Bring supporting materials to each coaching visit such as tools and action plans completed during training workshops, notes taken during previous coaching visits, or useful information concerning the health sector of interest.
4. Document each coaching visit in a coaching log and take notes during the coaching visit. Summarize your notes with the health professional before ending the session to verify the content of the discussion.
5. Write up a brief post-visit report to act as a reference for future coaching sessions and document changes in data use.
6. Follow-up with requested feedback, supplemental materials, or additional coaching sessions.

What makes an effective *Building Leadership for Data Demand and Use* coach?

After all necessary coaching sessions are completed, an effective coach is able to tell the story from the initial training workshop to the point at which the health professional is successful in overcoming their challenges. A great coach demonstrates that the resources dedicated to this ongoing capacity building resulted in increased instances of the use of data to inform decisions and, ultimately, improved health services. The remainder of this guide offers some tools and questions to assist the coach in achieving this outcome.

Coaching Log

Organization	Name of Health Professional	Position	Date of Coaching Visit	Purpose of Visit	Method of Communication
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

Post-Visit Coaching Report

Date of Report:

Data and Time of Coaching Session: _____ / _____ / _____   from _____ : _____ (am/pm) to _____ : _____ (am/pm)

Name of Coach:

Name of Health Professional(s):

It is helpful, especially if this is a follow-up coaching session, to indicate what your intentions were for this coaching session. Examples of a coaching purpose could be to describe what you hoped to achieve in this coaching session or identify specific information you hoped to learn. It is best to keep this purpose general and brief (no more than three lines of text).

Questions and Themes	Health Professional Statements	Reflections and Interpretations
This table suggests some common questions or themes that may arise and can be used to organize your notes from the session into a report. These questions can also be used to initiate a dialogue. Only use those subject areas that are relevant to the coaching session.	*This column is for direct quotes that the health professional provides during the coaching session that best summarize what was discussed, new insights, or possible solutions.*	*This column is for the coach to record principle ideas expressed, interesting information, and analysis. It is what the coach thinks happened during the session and can be subjective in nature.*
Leadership and Data-Use Environment • Could you please describe the challenges you are facing? (Find out in detail what the team is going through, who is involved, what political, social, environmental, or other issues are involved.) • What difference will overcoming this challenge make in achieving your planned results? • How do you think data is being used at this facility? Can you give examples? • In what ways are data being used to inform decisions about programs or health services? Can you give examples? • What do you think may be helping or inhibiting the use of data to make decisions? • What approaches have you tried to encourage the use of information by others?		
Data-Use Skills • What has been your experience using any of the skills or tools we worked on at the training workshop? (It is helpful to remind them of these skill or tools and probe for specific applications.) • Are there any aspects of the skill or tools that I can help you to understand better? • Are there other skills you feel you still need? • What do you think about the ways in which your team has been able to address commitments made during the training workshop?		
Team Action Plan to Address Barriers to Data Use • Can you tell me what happened when your team returned to the job site with your *Team Action Plan to Address Barriers to Data Use?* • Have any of the challenges or root causes changed? • What would you consider a success in regards to your action plan? • What do you think still remains to be accomplished? • What kinds of support do feel you feel your team still needs?		

Framework for Linking Data with Action • Can you tell me what happened when your team returned to the job site with your *Framework for Linking Data with Action*? • Have any of the planned activities in the framework changed? • What do you think still remains to be accomplished? • What kinds of support do you feel your team still needs?	
Leadership and Management Practices • What leadership (scanning, focusing, aligning and mobilizing, inspiring) or management practices (planning, organizing, implementing, monitoring and evaluating) might help your team move forward? • What leadership/management tools (root cause analysis, planning model, Kotter's eight steps to creating sustainable change) would be useful in this situation? • Reflecting on these practices and tools, what does the team want to do to overcome challenges, achieve results, and bring your team closer to its vision? • What are your next steps, and what do you need in order to take them? • What members of your team are committed to these steps? • When do you anticipate completing these steps?	

A Way Forward

It is helpful to note in the post-visit coaching report any actions and/or solutions that were generated during the coaching session. This can be used to guide the purpose of the next coaching session as well as document capacity-building progress towards data-use goals. It is important that the coach helps the health professional to plan actions that are within their control, are specific to their context (i.e., where, when, and with whom they want to take action), and whether they are supported with the necessary resources.