Welcome to the Measuring Success Toolkit: Using Data for Health Program Planning, Monitoring and Evaluation

This toolkit provides guidance on how to use data to plan a health program and to measure its success through monitoring and evaluation (M&E). It also offers links to important M&E-related resources. Basic introductions are provided throughout the toolkit, as well as a glossary of planning, monitoring and evaluation terms, for those less familiar with the concepts and demands of using data for program planning and M&E.

Links to important resources that have been selected by M&E experts are also provided for those with more experience or those needing to delve into further details and specific examples. The selected resources are not a comprehensive collection of all existing resources in that area. Rather, they reflect the most up-to-date body of knowledge in particular areas that relate specifically to planning, monitoring and evaluating health programs. Read more about our criteria for selecting resources.

You can find the information you need in one of four ways:

1. **Pages.** Browse for information and resources by clicking through the toolkit pages listed in the navigational menu on the right hand side of the toolkit. Each thematic page gives an overview of key points about the topic. Each page has a submenu that provides detailed information about a topic and selected resources so that you can put your ideas into action.

2. **Resources by Health Topics.** If you are interested in resources and tools for a specific
health programming area, such as maternal and child health, click on the health topic of interest in the "Resources by Health Topics" section on the right. Read more about how we define these health topics.

3. **Search engine.** Type search terms in the search box located to the right to find specific information or resources.

4. **Site map.** You can use the Site Map (located in the top right corner) to understand the layout of the toolkit and link to a specific section.

Most of the content of the toolkit is in English. Use the **Google Translate** drop-down menu located in the right pane to get an automated translation of the web pages into more than 50 foreign languages.

If you are new to the toolkit and want to get a quick start, the spreadsheet below may be useful. For more detailed instructions on how to use the toolkit, view the Measuring Success Toolkit Video Tutorial.

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### Are You Planning a Program?

<table>
<thead>
<tr>
<th>Issues To Consider:</th>
<th>Go To:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Find out how to discover what health problems your audience is facing</td>
<td>Needs Assessments and Formative Research</td>
</tr>
<tr>
<td>Learn how M&amp;E can help you answer questions throughout the life of your program</td>
<td>M&amp;E - A Process</td>
</tr>
<tr>
<td>Create a framework to guide your program</td>
<td>Frameworks</td>
</tr>
<tr>
<td>Develop an M&amp;E plan</td>
<td>Sample M&amp;E Plan</td>
</tr>
<tr>
<td>Plan for communicating and using your data</td>
<td>Sharing and Using Data</td>
</tr>
</tbody>
</table>
### Are You Monitoring a Program?

**Issues To Consider:**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Go To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use the M&amp;E plan</td>
<td>Sample M&amp;E Plan</td>
</tr>
<tr>
<td>Explore appropriate data sources</td>
<td>Data Sources</td>
</tr>
<tr>
<td>Collect data about indicators</td>
<td>Indicators</td>
</tr>
<tr>
<td>Ensure program is being conducted as planned</td>
<td>Indicators</td>
</tr>
</tbody>
</table>

### Are You Evaluating a Program?

**Issues To Consider:**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Go To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get an overview of sampling methods</td>
<td>Sampling Methods</td>
</tr>
<tr>
<td>Determine evaluation design</td>
<td>Study Designs for Evaluation</td>
</tr>
<tr>
<td>Ensure your findings get used</td>
<td>Sharing and Using Data</td>
</tr>
</tbody>
</table>
Site Developers

The Measuring Success Toolkit: Using Data for Health Program Planning, Monitoring and Evaluation is a collaborative effort among staff and projects of the University of North Carolina at Chapel Hill, specifically the Measurement, Learning & Evaluation (MLE) and the MEASURE Evaluation projects. The design team consisted of Barbara Burke (UNC/MLE), Jack Hazerjian (UNC/MEASURE Evaluation), Laili Irani (UNC/MLE), Livia Montana (UNC/MLE), Ruwaida Salem (JHUCCP for MLE), Ilene Speizer (UNC/MLE) and Beverly Tucker (UNC/MLE).

Collaborators

Individuals from other organizations also contributed their experience and expertise to review the toolkit and ensure its relevance and usefulness, including:

- Janine Barden-O’Fallon, MEASURE Evaluation
- Abby Cannon, MEASURE Evaluation
- Nkem Chukwume, Nigeria Ministry of Health
- Charlotte Colvin, PATH
- Elizabeth Cromwell, University of North Carolina Gillings School of Global Public Health
Criteria for Selecting Resources

The purpose of this toolkit is to strengthen the capacity of health care professionals to use data to inform program design, implementation, management and scale up. The toolkit provides an overview of how to plan, monitor and evaluate health programs. It also provides access to relevant and reliable resources that help put those ideas into action.

There are many resources on health program planning and M&E from a wide range of organizations and sectors. The purpose of this toolkit is not to collect all existing resources. Rather, the toolkit includes a selection of resources vetted by M&E experts to help health care professionals access the most important resources and focus their research. The toolkit is updated quarterly.

Specific criteria for selecting resources include:

- The resource pertains specifically to planning, monitoring and/or evaluating health programs.
- The resource is up-to-date and accurate.
- The resource provides a different perspective from other selected resources or covers additional content that is not covered in other selected resources.
We invite you to suggest additional resources for this toolkit, as relevant manuals, articles and guides are constantly being developed.

**Defining Health Topics**

The resources included in this toolkit are organized primarily by M&E topic indicated in the pages listed in the right hand navigational menu, such as Frameworks, Indicators and Study Designs for Evaluation. However, you can also view the resources by health topics by clicking on the Resources by Health Topic side bar on the right, which cover:

- **General Health** - This category encompasses resources that refer to M&E of global health programs generally, rather than those that focus on a specific disease area, as well as resources that cover other health or programming areas that are not included below. For example, capacity strengthening of health programs, human resources for health and gender fall under this category.

- **HIV/AIDS and Tuberculosis** - This category includes resources related to HIV/AIDS (and other STIs), tuberculosis (TB) and integrated HIV/AIDS and TB programs.

- **Malaria**

- **Maternal and Child Health**

- **Neglected Tropical Diseases**

- **Reproductive Health/Family Planning**, including postabortion care and population, health and environment (PHE) programs

- **Water and Sanitation**

**Contact Us**

For questions about the *Measuring Success Toolkit: Using Data for Health Program Planning, Monitoring and Evaluation*, please contact the MLE Project.

**Related eLearning Courses:**
Data Use for Program Managers
M&E Fundamentals

**M&E - A Process**
Successful health programs use data from research, monitoring and evaluation to guide design and implementation. Such data and information help solve health-related problems, inform new approaches to design programs, assess program effectiveness and efficiency, and suggest improvements to program performance.

Before getting started with M&E, it is important to first understand the fundamental differences between monitoring and evaluation. See also the Glossary of Planning, Monitoring and Evaluation Terms.

**Monitoring** tracks changes in program performance or key outcomes over time. It has the following characteristics:

- Conducted continuously
- Keeps track and maintains oversight
- Documents and analyzes progress against planned program activities
- Focuses on program inputs, activities and outputs
- Looks at processes of program implementation
- Considers program results at output level
- Considers continued relevance of program activities to resolving the health problem
- Reports on program activities that have been implemented
- Reports on immediate results that have been achieved

**Examples:** Number of insecticide-treated bed nets distributed by a malaria prevention program; number of cases of malaria in infants reported to a health facility in the prior three months.

**Evaluation** is a systematic approach to attribute changes in specific outcomes to program activities. It has the following characteristics:

- Conducted at important program milestones
- Provides in-depth analysis
- Compares planned with actual achievements
- Looks at processes used to achieve results
- Considers results at outcome level and in relation to cost
- Considers overall relevance of program activities for resolving health problems
- References implemented activities
- Reports on how and why results were achieved
- Contributes to building theories and models for change
- Attributes program inputs and outputs to observed changes in program outcomes and/or impact

**Example:** Evaluation of the impact of a malaria program on the number of malaria cases; requires a design that can attribute program inputs and outputs to disease outcomes.

**Understanding the Staircase Diagram**

The staircase diagram below, adapted from Rugg et al. (2004) found in the UNAIDS Basic Terminology and Frameworks for Monitoring and Evaluation, provides a useful perspective on the types of questions that can be answered by research, monitoring and evaluation. Reading from bottom to top, the first two questions are related to the program planning process, the next
two questions are related to the monitoring phase and the final two questions to the evaluation phase.

These questions provide a simple and practical way to organize the necessary resources to build a comprehensive M&E system.

Read more about each step of the staircase by clicking on the links in the navigation on the right.

Resources:

- **WASH Sustainability Index Tool**

  The WASH Sustainability Index Tool can be used to assess the likely sustainability of WASH interventions. The objective of the Tool is to enable a quantitative assessment of the likely sustainability of WASH interventions using a range of both quantitative and qualitative indicators. The Tool is a general monitoring or process assessment tool, rather than being designed for impact evaluation. It is designed to assess the extent to which crucial sustainability criteria are being met across a range of indicators grouped under five main areas or factors: institutional, management, financial, technical and environmental.

  Resources available include:
  - WASH Sustainability Index Tool Cheat Sheet
  - WASH Sustainability Index Tool (Complete Version)
  - WASH Sustainability Index Tool (Limited Version)
  - Additional Sustainability Index Tool documents
  - WASH Sustainability Index Tool Webinar video and slides

**Needs Assessments and Formative Research**

Before designing a health program or intervention, you first have to understand the
health problems that your intended audiences are facing and the key factors that contribute to these problems. **Formative research**—that is, research conducted before a program or activity is designed and implemented—can help identify answers to these questions. This type of research is also referred to as **needs assessment**.

Formative research focuses on describing the current situation. A needs assessment explicitly identifies gaps between the current and ideal situations. The terms are sometimes used synonymously, with formative research more common in the scientific and epidemiology fields and needs assessment more common among program planners.

Formative research and needs assessment can help you:

The needs assessment can serve as a baseline snapshot of the current status of a health problem, which you can then use as a means to compare the **effect of a program’s activities at a later date**. Needs assessments should be conducted with involvement from administrative and community leaders, program planners, service delivery personnel and program beneficiaries. When conducted collaboratively, the needs assessment can help all stakeholders—including members of the intended audience—agree on the priorities of the health program and how resources should be allocated. Needs assessments can also foster cross-sector partnerships that promote creative and effective interventions.

A variety of **data sources** can be used to identify the health problem, such as surveillance data, key informant interviews or field observations.

Alongside a needs assessment, you may also consider conducting a **situation analysis**—an assessment of the state of the context in which your organization or other relevant entity is operating. This analysis helps identify internal or external forces and trends that may help or hinder your performance and inform choices of alternative strategies. These forces and trends can be biophysical/ecological (for example, limited availability of clean water), socioeconomic (high unemployment) or policy/institutional (staffing patterns at health centers). If your focus is on external factors, you can use the common acronym PEST (or STEP) to frame the analysis:

**Politics**

**Economics**

**Social issues**

**Technology**
Variations include STEEP (with the added Environmental/Ecological issues) and PESTLE (addition of Legislative issues).

Another planning tool often used in situation analysis is SWOT analysis. Using SWOT, the organization examines its current and future Strengths, Weaknesses, Opportunities and Threats. Organizations often compare themselves to other organizations working in the same field during this review process.

- decide which health problems to focus on?both in terms of what audiences perceive to be priorities and which problems can feasibly be resolved within a certain timeframe and budget
- determine the cultural, environmental and political factors that contribute to health problems
- explore past interventions, literature reviews, meta-analyses and reports on best practices to identify lessons learned; to understand successes, challenges and failures to avoid repeating the same mistakes
- identify new or innovative intervention strategies

Read more: What interventions can work?

Resources:

- **Barrier Analysis Questionnaires**

  TOPS has provided training in the Designing for Behavior Change framework, which recommends the use of Barrier Analysis (BA), a survey that identifies the most significant barriers to behavior change. TOPS created a set of 30 BA Questionnaires and guidance on how to adapt these questionnaires as references for organizations planning to implement BA.. The questionnaires cover a range behaviors including: maternal and child nutrition, health, water and sanitation and agriculture. The questionnaires can be used exactly as they are, but can also be modified to match the context in which they will be used.

  To learn more about how to plan and implement BA for your project, see this Practical Guide to Conducting a Barrier Analysis.

- **Referral Systems Assessment and Monitoring Toolkit**

  As a result of the recent impetus toward service integration in the health systems of developing countries, the Referral Systems Assessment and Monitoring (RSAM) Toolkit was developed to assist health and program managers obtain and use information regarding the performance of referral systems. This toolkit contains to main components: 1) The Referral
System Assessment (RSA), which is used as an in depth examination of the referral processes and mechanisms, and 2) Referral System Monitoring (RSM), which is used to generate routine data on the frequency and completion of referrals across services. These tools were originally designed to assess and monitor HIV/AIDS referral systems, but can be adapted for any type of referral system. The toolkit provides clear, step-by-step instructions to assist managers in deciding which component to implement; which tools to use; how to adapt the tools; how to use the tools for data collection; and how to analyze, interpret, and use the information generated.

- **Information Systems Strategy: STEEP Analysis**

  This presentation focuses on STEEP analysis and describes what it is, why you would use this type of analysis, and how to conduct it.

- **A Practical Guide for Conducting and Managing Gender Assessments in the Health Sector**

  This guide is a user-friendly Gender Analysis tool. It provides answers to questions such as:
  
  - What does it mean to conduct a gender assessment?
  - How do you comply with USAID's strategic focus on gender in program design and implementation?
  - How do you turn the findings from a gender analysis into practical recommendations?

  The objective of this guide is to enable its users to design, collect, use, or manage information on the linkages between gender inequality and health.

- **Components of a Situation Analysis**

  This brief outlines the components of a situation analysis, including:
  
  - Analysis of Trends
  - Common Sources of Secondary Data
  - SWOT Analysis
  - Key Informant Interviews
  - Focus Group
Community HIV Counseling and Testing: A Handbook on Participatory Needs Assessment

Community HIV Counseling and Testing (COHCT) needs assessment refers to the process through which community members interact with a development agency to assess their HIV counseling and testing needs, identify key problems, and develop an action plan to address those needs. This handbook provides basic conceptual explanations and guidelines on how to conduct a COHCT needs assessment as an entry process for community planning for HIV counseling, testing, care, and support. The handbook is organized in five modules:

- **Module I** is an introductory module describing the concept of COHCT and its role in putting HIV counseling, testing, care, and support on the community agenda.
- **Module II** focuses on the participatory learning and action (PLA) methodology in the context of HIV/AIDS.
- **Module III** provides a menu of PLA tools that can be used to engage the community in analyzing its own HIV situation.
- **Module IV** focuses on data analysis and reporting, describing how PLA data is analyzed and offering tips on communicating findings in a report.
- **Module V** gives a step-by-step guide on how to facilitate community planning while using data generated from the COHCT needs assessment.

Public-Private Mix for TB Care and Control: A Tool for National Situation Assessment

This document focuses on the National Situation Assessment (NSA) Tool which aims to collect and collate information on all aspects of public-private mix (PPM) for tuberculosis (TB) care and control in a country, and to facilitate the use of this information to assist the systematic implementation of PPM.

Health Needs Assessment: A Practical Guide

The purpose of this guide is to provide practical assistance to everyone engaged in undertaking a Health Needs Assessment (HNA), including strategic managers, facilitators, practitioners in primary care trusts, local government, and the voluntary and community sectors.
Baseline Assessment Tools for Preventing Mother to Child Transmission (PMTCT) of HIV

The assessment tools aim to: help determine whether existing health services are adequately prepared for the introduction of PMTCT interventions; identify gaps for improving ANC/MCH services and for integrating PMTCT services to ensure that PMTCT interventions are safe and effective; provide guidance for maintaining high quality services through effective monitoring and evaluation of PMTCT programs.

• Child Needs Assessment Tool Kit

This package is designed to assess the needs of young children in communities heavily affected by the HIV/AIDS epidemic. The information from the assessment is intended to be used to design service programs, targeted to the needs of these young children and their families.

• HIV/AIDS Rapid Assessment Guide

This guide consists of five tools to assist in assessing HIV/AIDS within a program or project area to understand the contextual factors, such as the population and their health and social views, to be considered when conducting a needs assessment. The five tools are:

  o A mapping guide
  o A site inventory
  o An ethnographic guide
  o A focus group guide
  o Rapid behavioral surveys

• Community Health Needs Assessment: An Introductory Guide for the Family Health Nurse in Europe

This guide describes the ways in which health needs assessment can identify priority health needs, target resources to address inequalities and involve local people. The guide provides practical guidance on the process of undertaking health needs assessment, from reviewing the types of health information one may need to identify health needs and how to collect that information, to how to analyze the information collected. The guide also includes a section for training the trainers in the use of the assessment tool. It provides practical ideas and
suggestions on how the trainer can support and prepare nurses to undertake a health needs assessment of their local community.

- **A Community Needs Assessment Guide: A Brief Guide on How to Conduct a Needs Assessment**

  This report provides guidance on conducting a community needs assessment. It briefly details the steps of the Concerns Report Method beginning with the planning phases and ending with implementation of action committees and the utilization of findings from the needs assessment.

- **Workbook 3: Needs Assessment**

  This workbook is part of a series intended to educate program planners, managers, staff, and other decision-makers about the evaluation of services and systems for the treatment of psychoactive substance use disorders. The objective is to enhance their capacity for carrying out evaluation activities. Workbook 3 describes what a needs assessment is and the various approaches to conducting a needs assessment. As no single, all-purpose needs assessment technique applies to all scenarios, this workbook also includes a series of case examples that describe different types of needs assessments within a variety of contexts.

- **Needs Assessment: From Theory to Practice**

  This article is part of a series describing approaches to and topics for health needs assessment, and how the results can be used effectively. This particular article describes several approaches to conducting health needs assessments while considering contextual factors such as resources and priorities.

- **The Reliability of the Situation Analysis Observation Guide**

  This article reports on the reliability of observational data used to conduct a situation analysis. The assessment of the inter-rater reliability of observational data from a study in Turkey is described.
Needs Assessment of Emergency Obstetric and Newborn Care Toolkit

The Needs Assessment of Emergency Obstetric and Newborn Care (EmONC) Toolkit contains documents needed to plan for and conduct an EmONC needs assessment. Within the EmONC Toolkit you will find:

- **Data Collection Modules** consisting of standard questionnaires (modules) used to gather the data for an EmONC needs assessment.
- **Data Collector's Manual** providing detailed information about the study methodology, general rules for data collection, and a module-by-module guide to data collection.
- **Needs Assessment Facilitation Guide** intended to familiarize one with the entire EmONC needs assessment process, from advocacy and planning to conducting the needs assessment, dissemination, and action-planning.

- **What is PEST Analysis?**

This handout describes what PEST Analysis is and the political, economic, and sociocultural factors to consider.

- **PEST Analysis**

PEST Analysis is a simple but important and widely-used tool that helps you understand the big picture of the **Political**, **Economic**, **Socio-Cultural** and **Technological** environment you are operating in. PEST is used by business leaders worldwide to build their vision of the future.

- **Situational Analysis? Building Involvement and Ownership**

This two-page brief highlights the importance of stakeholder involvement in carrying out a situation analysis. Ultimately, programmatic needs are better served if stakeholders and/or communities feel they have been meaningfully involved in the process and therefore establish a sense of ownership of the process. This brief outlines components of a situation analysis, questions to ask when developing a process and conducting a situation analysis, and the importance of communication with stakeholders during the process.
Intervention Design

During the design stage or before launching a full-scale activity, some health programs start with operations research to test what works best in a particular setting. Operations research may take the form of pilot projects designed with the assumption that they will be scaled up if effective.

Similarly, a program can start in a few locations and replicate or expand to other locations. The delayed-intervention locations can serve as a comparison group to help identify effective interventions. For example, the Urban Reproductive Health Initiative promotes innovative family planning programs in four countries (India (Uttar Pradesh), Kenya, Nigeria and Senegal), focusing particularly on meeting the needs of the urban poor. In each country, family planning interventions are being implemented initially in four cities (three in Kenya). Two additional cities in each country will receive delayed interventions, serving as comparison cities. Comparing delayed-intervention cities with initial program cities can provide meaningful measures of program impact and identify the most effective and cost-efficient approaches to improving contraceptive use among the urban poor.

These kinds of research studies are not always possible or practical, as they can be costly and time-consuming. In such situations, it may be enough to learn from other projects in similar settings. These projects may have tools, resources or lessons learned that will be useful to replicate or modify for specific needs identified from your formative research. In addition, there may be elements of a successful project that your program can expand or scale up. It is very likely that a successful project in one location can become an innovation in another.

It is important to incorporate a gender perspective when planning program activities and planning to monitor and evaluate those activities. Program strategies can be employed to take relevant gender norms into account and to compensate for gender-based inequalities.

Based on the approaches displayed in the first two steps in the staircase—that is, from formative research, needs assessment, situation analysis, operations research and/or learning from other projects in similar settings—the program planner will develop program goals and objectives and a logic model that describes the program’s interventions and approaches. Read more about how to set up a logic model for your health program.
Resources:

- **Nutrition Program Design Assistant, Version 2**

  The Nutrition Program Design Assistant: A Tool for Program Planners helps program planning teams select appropriate community-based nutrition approaches for their specific community-based program target areas. The tool has two components: 1) a reference guide that provides guidance on analyzing the nutrition situation, identifying program approaches, and selecting a combination of approaches that best suits the situation, resources, and objectives and; 2) a workbook where the team records information, decisions, and decision-making rationale.

  Step 1 in the reference guide (page 20) provides guidance in gathering and synthesizing data on the nutrition situation, including both quantitative and qualitative data, for program design; Step 2 provides guidance on how to build a logical framework (page 40); and Step 3 (page 46) provides assessment resources for gathering health and nutrition services. Additional quantitative data collection and M&E resources are provided in Annex 3.

  Also available is the NPDA Workbook in PDF, Word, or Excel format with adaptable templates to use as needed for data collection and developing a Logical Framework.

- **Integrating Gender into Scale-up Mapping Tool**

  The tool provides program managers with a methodology to systematically integrate gender into scale-up initiatives. This tool focuses on addressing gender in the implementation and scale up of a best practice rather than integrating gender into the best practice itself.

- **SWOT Analysis: Strengths, Weaknesses, Opportunities, and Threats**

  This section of The Community Toolbox describes a SWOT analysis, including:

  - What is a SWOT analysis and why should you use one?
  - When do you use SWOT?
  - What are the elements of a SWOT analysis?
○ How do you create a SWOT analysis?
○ How do you use your SWOT analysis?

mBCC Field Guide: A Resource for Developing Mobile Behavior Change Communication Programs

What is considered a standard mobile health (mHealth) program today might be defunct within a few short years. Tools are needed to guide the design of mobile applications for health and to elicit insights about what does and does not work without duplicating existing resources. This Field Guide is an attempt to take stock of what we know today about the power of mobile communication tools to influence health behaviors at both the consumer and health care provider levels. While this guide focuses on applying mobile strategies to health problems, the same principles can be used to address issues in other sectors, such as agriculture and the environment.

Priorities in Operational Research to Improve Tuberculosis Care and Control

The objective of this publication is to help programme managers, consultants and researchers who intend to conduct TB-related operational research to identify the appropriate methods to be used according to the questions that are being addressed, and prepare for grant applications to donors (including the Global Fund) for operational research support.

TB Control at a Glance

This brief on tuberculosis (TB) control addresses TB from a public health perspective, providing an overview of the disease worldwide. A brief review of the DOTS Strategy for controlling TB and how to adapt DOTS to local conditions is included. Summary tables in the brief describe the core elements of the DOTS Strategy and related interventions for TB control.

SWOT Analysis: Strengths, Weaknesses, Opportunities and Threats of the Israeli Smallpox Revaccination Program
During September 2002, Israel began its current revaccination program against smallpox, targeting previously vaccinated "first responders" among medical and emergency workers. In order to identify the potential strengths and weaknesses of this program and the conditions under which critical decisions were reached, we conducted a SWOT analysis of the current Israeli revaccination program, designed to identify its intrinsic strengths and weaknesses, as well as opportunities for its success and threats against it. SWOT analysis—a practical tool for the study of public health policy decisions and the social and political contexts in which they are reached—revealed clear and substantial strengths and weaknesses of the current smallpox revaccination program, intrinsic to the vaccine itself. A number of threats were identified that may jeopardize the success of the current program, chief among them the appearance of severe complications of vaccination. Our finding of a lack of a generation of knowledge on smallpox vaccination urgently calls for improved physician education and dissipation of misconceptions that are prevalent in the public today.

**M&E Plans**

Once program planners have developed a logic model that describes a health program's planned interventions, it is time for the program to start implementing activities.

As program planners begin to plan and develop their interventions, the monitoring and evaluation (M&E) team should begin to design an M&E strategy. With input from program planners, donors and other program stakeholders, the M&E team should develop a comprehensive and integrated Monitoring and Evaluation Work Plan that will better ensure that program activities are undertaken as planned or revised in order to produce the intended program results.

The **Monitoring and Evaluation Work Plan** helps guide the work of the M&E team across the life of the project. The M&E Plan is a guide that defines:

- **goals and objectives**
- **specific M&E questions**
- **activities to be implemented**
- **methods and designs to be used for monitoring and evaluation**
- **data to be collected**
- **specific tools for data collection**
- **required resources**
- **responsible parties to implement specific components of the plan**
• expected results
• proposed timeline

See a sample outline of an M&E Plan.

The M&E Plan helps assess progress of the program toward achieving its goals and objectives. Periodic reports on this progress are used to inform key stakeholders as well as program implementers and directors. M&E work plans often cover a 4-5 year period, during which time various interventions may have been implemented that the M&E team needs to track and assess. Some of the M&E-reported results describe program outcomes, which are short-term results, while others describe overall program impact. These latter long-term effects can be observed only after some years of program implementation. Thus, the M&E work plan is an important tool used by M&E officers for comprehensive planning on how to study and report on the program and its effects.

The M&E team might also develop a Performance Monitoring Plan (PMP) to satisfy donor requirements. Based on information from the M&E Plan, the PMP identifies and defines performance indicators and data sources. It also articulates operational aspects (who? how? how often?) regarding scheduled data collection and analysis. In addition, this plan should provide operational guidance for reviewing and using data to make decisions, so that program management can be based on data-driven decisions.

The focus during the monitoring stage is on program activities (outputs) rather than on behavioral changes among the program’s beneficiaries (outcomes and impacts). Monitoring should be conducted continuously throughout the life of a program by everyone within the implementing organization. Front-line workers and supervisors will mostly be responsible for collecting the necessary data, and managers and senior staff will need to use the data to inform program management and direction.

The M&E team and program staff should also keep in mind the need to observe ethical guidelines during data collection, at each point during the planning, monitoring and evaluation stages, to ensure that people who are interviewed or observed provide voluntary consent and that sensitive data remains confidential.

Monitoring includes activities related to process monitoring, quality assessments and process evaluation.

Process Monitoring:
• Tracks the implementation of program activities
• Is descriptive in nature
• Example: A malaria prevention program trains providers to distribute bed nets to households
with young children and trains household members on how to use them appropriately. Process monitoring tracks when and where providers distribute the bed nets.

**Quality Assessment:**

- Examines the content and approach used in program activities
- Determines whether the program is implemented in a high-quality manner and whether it is being implemented similarly across program sites
- **Example:** In the malaria prevention program example above, quality assessment examines whether the sites' providers are giving proper standardized information to household members as they were trained to do.

**Process Evaluation:**

- Focuses on changes in program and provider behaviors (not behaviors of the program's beneficiaries) that are a direct result of program activities
- **Example:** Using the same malaria program example above, process evaluation assesses whether trained providers are actually distributing bed nets to households with young children. If providers are not distributing bed nets to the targeted households as planned, one cannot expect the program to achieve its intended impact of reducing malaria-related child mortality.

Through these types of monitoring approaches, a health program can obtain information on what is actually occurring and compare actual levels of achievement to planned activities. With this information in hand, program managers can take corrective action during the program implementation phase if necessary. For example, the malaria prevention program cited above may identify the need to reimburse providers for their travel expenses when distributing bed nets in order to obtain high levels of adherence to the distribution plan, which it might not have considered beforehand.

Read more: Are we implementing the program as planned?

**Resources:**

- **Performance Management Plans: A Checklist for Quality Assessment**

  A performance management plan (PMP) establishes guidelines for the collection of specific information that will be used to assess program or project progress and guide decision making. This 14-item checklist is designed to help managers determine whether or not a document has the basic characteristics of a good PMP.
The Community Score Card (CSC): A generic guide for implementing CARE’s CSC process to improve quality of services

The Community Score Card (CSC) is a two-way and ongoing participatory tool for assessment, planning, monitoring and evaluation of services. The Community Score Card brings together the demand side (?service user?) and the supply side (?service provider?) of a particular service or program to jointly analyze issues underlying service delivery problems and find a common and shared way of addressing those issues.

The Community Score Card is a participatory tool that:
- Is conducted at micro/local level and uses the community as the unit of analysis
- Generates information through focus group interactions and enables maximum participation of the local community
- Provides immediate feedback to service providers and emphasizes immediate response and joint decision making
- Allows for mutual dialogue between users and providers and can be followed by joint monitoring

A Guide to Developing a TB Program Evaluation Plan

Good planning will assist the evaluation process and writing an evaluation plan is an essential part of the planning process. This Guide can be used to assist TB staff in developing an evaluation plan. A template is included along with detailed instructions for filling out each section of the plan.

Guidance on Developing Terms of Reference for HIV Prevention Evaluation

The purpose of this guide is to facilitate planning HIV prevention-related evaluations, their design, and drafting terms of reference (TOR) or scope of work. The first section of the TOR guide includes basic definitions and concepts about evaluation, including the rationale for and role of evaluations. Section two of the TOR guide describes how to prepare the TOR (i.e., scope of work) for a prevention evaluation. Illustrative examples are included in the appendices of the guide.

Conducting a Community Assessment

The Conducting a Community Assessment guidebook will be helpful to any organization or coalition of organizations that wants to know what assets and needs exist within its
In order to effectively serve a community, it is important to understand the community. This understanding can be achieved through a community assessment. The findings from an assessment will define the extent of the needs that exist in a community and the depth of the assets available within the community to address those needs. This understanding of needs and assets can be used to strategically plan and deliver relevant, successful, and timely services.

**Handbook on Planning, Monitoring and Evaluating for Development Results**

The objectives of the handbook are to provide the reader with a basic understanding of the purposes, processes, norms, standards and guiding principals for planning, monitoring and evaluation within the UNDP development context. The guide provides guidance on essential elements of the evaluation process: developing an evaluation plan, managing, designing and conducting quality evaluations, and using evaluation for managing development results, learning and accountability. Extra resources for evaluation are included in the handbook annexes. This guide is intended for UNDP staff, stakeholders and partners, as well as members of the national, regional and global development and evaluation community. This handbook is available in Spanish, French, Arabic and Russian.

In order to reflect changes in the 2011 UNDP Evaluation Policy, and addendum to this handbook is available here:


**Handbook on Planning, Monitoring and Evaluating for Development Results**

This handbook is intended to assist with program planning, monitoring, and evaluation. It provides a basic overview of the purposes, processes, standards, and guiding principles for planning, monitoring, and evaluation as well as a description of the essential elements of planning, monitoring, and evaluation, including a results-based framework, performance indicators, and an evaluation plan.

**A Framework for Monitoring and Evaluating HIV Prevention Programmes for Most-At-Risk Populations**

This publication provides guidance in monitoring and evaluating HIV prevention programs for most-at-risk populations. It is designed primarily for program managers and others involved in planning and implementing monitoring and evaluation of programs and projects for most-at-risk populations at both national and subnational levels. The appendix of this document
includes a list of indicators (and their method of measurement) relevant to most-at-risk populations.

- **Guidelines for the Development of Small-Scale Rural Water Supply and Sanitation Projects in East Africa**

  This document constitutes general guidelines for the planning and implementation of small-scale water supply and sanitation activities in rural East Africa, which includes both projects funded under the USAID Title II (Food for Peace) Program and projects funded by other donors. It is intended to assist Catholic Relief Services (CRS) and its partners in improving the effectiveness, environmental protection and long-term sustainability of water and sanitation activities in the rural, and often food-insecure, areas of East Africa.


  This module of the Training Guide is intended to increase participants? capacity to develop and implement comprehensive monitoring and evaluation plans for HIV prevention and care programs. Using the Training Guide, Facilitators will provide an overview of monitoring and evaluation work plans, their key elements, and the seven steps to developing a plan. Additionally, a work plan template is included in the Guide.

- **PHAST Step-By-Step Guide: A Participatory Approach for the Control of Diarrhoeal Diseases**

  This guide outlines and describes a seven step process communities can use for developing a plan to prevent diarrheal diseases by improving water supply, hygiene behaviors, and sanitation. The process includes developing a monitoring and evaluation plan.

- **Preparing a Performance Monitoring Plan**
A performance monitoring plan (PMP) is a tool used to plan and manage the collection of performance data. PMPs can also include plans for data analysis, reporting, and use. This resource describes the elements one should consider including in a PMP.

- **Planning a Program Evaluation**

  This guide is designed to help with planning a program evaluation. It is organized into the four main sections listed below, each of which includes a series of questions to consider when planning a program evaluation.

  - Focusing the Evaluation
  - Collecting the Information
  - Using the Information
  - Managing the Evaluation

- **PRISM: Performance of Routine Information System Management Framework**

  The Performance of Routine Information System Management (PRISM) framework is designed to assist programs in assessing the overall level of Routine Health Information System (RHIS) performance to identify strengths and weaknesses and to identify the underlying technical, organizational, and behavioral reasons for those strengths and weaknesses. The framework consists of a set of tools to use for assessing and identifying factors affecting the RHIS and to assist in designing priority interventions to improve performance, and improve quality and use of routine health data.

**Output and Outcome Monitoring**

The fourth step in the M&E staircase goes hand-in-hand with the previous step; both focus on implementation of program activities. The previous step centers on the quality of program implementation while this step focuses more on the extent of program outputs. It attempts to answer the question of ‘how many,’ termed output monitoring.

**Output Monitoring:**
Tracks the number of activities (trainings, resources and services) implemented over the course of the program and whether they are happening at a level sufficient to cover the target population as intended

- Quantitative in nature
- Involves regular, usually quarterly, review of accomplishments

**Example:** A malaria prevention program that trains providers to distribute bed nets to households with young children could monitor outputs related to the number of providers trained, number of households that received bed nets and number of people reached with educational materials about malaria prevention.

This step also addresses **outcome monitoring**—the continual process of tracking program outputs and measuring their contribution to achieving outcomes, such as changes in knowledge, attitudes, beliefs and behaviors among the program’s beneficiaries. An important point to note is that outcome monitoring does not infer causality. In other words, any changes observed in outcomes could be due to a number of factors, not just the specific program.

**Outcome Monitoring:**

- Periodic assessment of the effects from program inputs and outputs, usually initiated after the first or second year of the program and annually thereafter
- For national health programs, outcome monitoring is typically conducted through population-based surveys.
- **Example:** Percent of households with at least one bed net

Intended outcomes in this malaria program prevention example, examined during program evaluation, could include reduction of malaria morbidity and mortality among children.

In order to address gender differences across the monitoring phase of a program, certain steps can be taken:
- Collect and analyze indicators that measure gender-specific outputs.
- Disaggregate data collection and analyses by sex.
- Collect data in areas such as attitudes and behavior that reflect gender norms.

During both monitoring and evaluation phases, triangulating data—that is, cross-comparing and reconciling information on related topics from different sources—can be useful in strengthening interpretations and improving decision-making. Triangulation does not infer causality; rather, it offers a rational explanation or interpretation of the data at hand.

To determine if a particular program achieved its intended outcomes and by how much, in other words, whether the program is making a difference—the program must conduct outcome evaluation, as explained in the next M&E staircase step.
Read more: Are interventions working/making a difference?

Resources:

- **Outcome Monitoring for Global Health Programs**

  Outcome monitoring is the periodic measurement of the knowledge, behaviors, or practices that a program or intervention intends to change. This resource provides a general resource for the rational and practice of outcome monitoring of global health programs. Also included are example indicators, checklists for preparing outcome monitoring, and data collection methods.

- **The Human Resource Capacity Development in Public Health Supply Chain Management: Assessment Guide and Tool**

  This guide presents a structured, rating-based methodology designed to provide a rapid, comprehensive assessment of the capacity of the human resource support system for a country’s supply chain. The findings are transformed into specific recommendations and strategies for action based on an understanding of country priorities and programming gaps.

- **Referral Systems Assessment and Monitoring Toolkit**

  As a result of the recent impetus toward service integration in the health systems of developing countries, the Referral Systems Assessment and Monitoring (RSAM) Toolkit was developed to assist health and program managers obtain and use information regarding the performance of referral systems. This toolkit contains two main components: 1) The Referral System Assessment (RSA), which is used as an in depth examination of the referral processes and mechanisms, and 2) Referral System Monitoring (RSM), which is used to generate routine data on the frequency and completion of referrals across services. These tools were originally designed to assess and monitor HIV/AIDS referral systems, but can be adapted for any type of referral system. The toolkit provides clear, step-by-step instructions to assist managers in deciding which component to implement; which tools to use; how to adapt the tools; how to use the tools for data collection; and how to analyze, interpret, and use the information generated.
Impact Evaluation in Practice

The document is structured around nine key issues that provide guidance on conceptualizing, designing, and implementing an impact evaluation, including: Identify the type and scope of the intervention; Agree on what is valued; Carefully articulate the theories linking interventions to outcomes. Address the attribution problem; Use a mixed-methods approach—the logic of the comparative advantages of methods; Build on existing knowledge relevant to the impact of interventions; Determine if an impact evaluation is feasible and worth the cost; Start collecting data early; and Front-end planning is important.

Monitoring the Quality of Primary Care

This reference guide is designed for health facility managers who wish to establish a formal system for assessing and improving the quality of primary care delivered at their facilities. This document focuses on how to improve quality of care at a facility.

Outcome and Impact Evaluation

As you walk through the steps of implementing a health program and monitoring its processes and outputs, you will eventually need to answer the basic, but often difficult, questions of whether and by how much the program achieved its intended outcomes, for example, of reducing morbidity and mortality. This type of analysis requires assessing ?before and after? data, for example, use of bed nets before and after a malaria prevention program was implemented.

While the previous step collects information to monitor outcomes, such as changes in knowledge, attitudes or behaviors among the program?fs beneficiaries, any changes observed in outcomes could be due to a number of factors that may or may not be related to your specific health program. To determine if the observed changes in outcomes can be attributed to your specific program, an outcome evaluation must be conducted.

An outcome evaluation is achieved by designing studies to attribute program activities to the short- and long-term outcomes that the program has had on the
desired community. A key requirement of determining whether a program caused a particular health outcome is demonstrating the "counterfactual" of what would have happened in the absence of the program, often accomplished by having a comparison (or control) group that was not exposed to the program. The "gold standard" is the randomization of study participants into a group exposed to the program and an unexposed control group. However, it is often not possible to design a randomized controlled trial; alternative designs include quasi-experimental and non-experimental studies that are less rigorous but more appropriate for certain settings.

In settings where it is not possible to have a control group, innovative techniques can be implemented to evaluate a program. The selected study design would depend on the goals and activities of the program, the amount of resources (such as time and funding) available to conduct an evaluation, the purpose of the evaluation and the expectations of various stakeholders.

An **outcome evaluation** requires an in-depth understanding of the program design, often illustrated through the logic model. The logic model helps the evaluator:

- Understand the kind of change desired and the means by which that change could occur
- Operationalize the definition of the desired change
- Identify appropriate indicators that can measure the change
- Determine the feasibility of the program to produce the desired change

Outcome evaluation may be conducted at different points during the life of a program, or only once after the program is completed. It complements ongoing monitoring, which is grounded in regularly scheduled reviews of implementation processes and progress made toward time-bound achievements. By contrast, outcome evaluation provides an overarching analysis of program performance and whether changes in people's health can be attributed to the program. Such information can then be used by governments and donors, as well as others designing or evaluating programs in other settings.

**Impact evaluation** has the same goal as outcome evaluation, although it is conducted later than outcome evaluation—typically years after the end of a program—to determine the *lasting* effect on the target population. It is most often structured as an experimental design. When random assignment is impractical, quasi-experimental designs can be used. Quasi-experimental and non-experimental designs that lack a comparison group require data analysis by advanced statistical methods to demonstrate attribution. Furthermore, data from existing large scale studies, and surveys can be used to conduct impact evaluation in instances where such datasets exist and are accessible to the M&E staff.

In order to address gender differences across the evaluation phase of a program, certain steps can be taken:

- Measure impact on outcomes that relate to gender-specific programming.
- Evaluate elements that address gender equity.
- Use data to demonstrate that progress and positive impact influence demand for richer data.

Given the time lapse, an impact evaluation needs to consider the likelihood of other confounding influences and agents that may have had positive and/or negative consequences on the desired changes in the target population as well. In this way, impact
evaluation is able to determine if the program’s over-arching goals and objectives were met and describes the lessons learned from the implementation of the interventions within the specific population.

Ideally, evaluations are conducted by an external individual or group. Evaluators would preferably plan the evaluation alongside the program, drawing on representatives from the implementing organization and major stakeholders who benefit from the program at various stages throughout the evaluation. Participation of stakeholders can inform the evaluation itself and can ensure that the evaluation’s results will be used.

Read more: Is the program sustainable and scalable?

Resources:

- Research Questions, Hypotheses and Clinical Questions

This chapter from a text book, *Nursing Research*, uses simple language to discuss different types of hypotheses and research questions and the process for developing them. This is a good resource for building a foundation of knowledge and providing instructions on putting the information into practice.

NOTE: This is a useful tool to describe the process of formulating research questions and hypotheses but the examples provided are more specific to clinical research, not public health.

- Developing Good Evaluation Questions Webinar

This webinar discusses how to develop evaluation questions that will help ensure high quality performance evaluations from external evaluators. Critical tips are presented along with a variety of negative and positive examples from real USAID Evaluation Statements of Work. If you expect to manage an evaluation, work on an evaluation statement or work, or participate in a peer review for an evaluation statement of work, this webinar is for you. It includes both a short slide presentation and plenty of time allotted for questions and answers.

- Evidence Gap Maps: A Tool for Promoting Evidence-Informed Policy and Prioritizing Future Research

Evidence-gap maps present a new addition to the tools available to support evidence-informed policy making. Evidence-gap maps are thematic evidence collections covering a range of issues such as maternal health, HIV/AIDS and agriculture. They present a visual
overview of existing systematic reviews or impact evaluations in a sector or subsector, schematically representing the types of interventions evaluated and outcomes reported. Gap maps enable policy makers and practitioners to explore the findings and quality of the existing evidence. The gap map also identifies key gaps where little or no evidence from impact evaluations and systematic reviews is available and where future research should be focused. Thus, gap maps can be a useful tool for developing a strategic approach to building the evidence base in a particular sector. This paper provides an introduction to evidence-gap maps, outlines the gap-map methodology, and presents some examples of evidence gap maps.

- **Measuring the Impact of National PMTCT Programmes**

A short guide summarizing the different approaches to assessing specific outcomes of interventions to prevent mother-to-child transmission (PMTCT) of HIV. It can be used as a reference that provides an overview of methods to measure PMTCT impact or when planning impact assessment activities.


A comparison of 18 commonly used family planning costing and impact analysis tools. Tools were compared for overall usability in terms of data needs, ease of use, and availability of continued tool support for users. Includes a comparison chart and individual tool descriptions, including where to find the various tools.


With unmet need for family planning remaining high, particularly in the world’s poorest countries, and reproductive health programs struggling to meet the demand for their services, comprehensive assessments are needed to improve family planning programs and ensure that they meet the reproductive intentions of their clients. In response to this need, EngenderHealth developed the SEED? Assessment Guide for Family Planning Programming, a comprehensive, easy-to-use tool to help program managers and staff determine strengths and weaknesses in family planning programs by identifying programmatic gaps that require further investment or more in-depth assessment prior to (re)designing programmatic interventions. The guide is primarily intended for use by high- or mid-level FP program staff in technical organizations, ministries of health, or donor agencies,
though others working in the area of sexual and reproductive health could also find it useful. See more at: http://www.engenderhealth.org/pubs/family-planning/seed-assessment-guide...

- **Impact Evaluation in Practice**

This resource provides a comprehensive introduction to impact evaluation, starting with an overview of impact evaluation and the many reasons why evaluation is important and useful. The resource serves as an instructional guide describing "How to Evaluate", with sections on determining an evaluation question, a review of factors that play a role in evaluation, and the various designs one can use for an impact evaluation. Lastly, part three of the resource describes how to implement an evaluation, including sections on sampling, data collection, and dissemination of evaluation findings.

- **Handbook on Impact Evaluation: Quantitative Methods and Practices**

This book reviews quantitative methods and models of impact evaluation. This book also details challenges and goals in other realms of evaluation, including monitoring and evaluation (M&E), operational evaluation, and mixed-methods approaches combining quantitative and qualitative analyses.

- **Impact Evaluation in Practice**

The document is structured around nine key issues that provide guidance on conceptualizing, designing, and implementing an impact evaluation, including: Identify the type and scope of the intervention; Agree on what is valued; Carefully articulate the theories linking interventions to outcomes. Address the attribution problem; Use a mixed-methods approach—the logic of the comparative advantages of methods; Build on existing knowledge relevant to the impact of interventions; Determine if an impact evaluation is feasible and worth the cost; Start collecting data early; and Front-end planning is important.

- **Institutionalizing Impact Evaluation within the Framework of a Monitoring and Evaluation System**

Impact evaluation (IE) is an important program and project budgetary planning, policy formulation, management, and accountability tool. In short, the institutionalization of IE refers to a standardized and systematic approach to identifying, implementing, and using
evaluations. This resource promotes the institutionalization of IE at the sector and national levels. Sections within this resource review: IE, pathways to building and achieving institutionalization of IE, the promotion of IE, and developing capacity for IE.

- **A Guide to Water and Sanitation Sector Impact Evaluations**

  The use of impact evaluations is promoted to demonstrate the effectiveness of water supply and sanitation (WSS) policies and programs. This guide is designed to assist users in developing an understanding of impact evaluations and to assist in designing and implementing WSS impact evaluations. Sections are included on impact evaluation methodology and a review of the common challenges in conducting WSS impact evaluations.

- **Health Facility Survey. Tool to evaluate the quality of care delivered to sick children attending outpatient facilities**

  This manual describes a survey method for evaluating the quality of care delivered to sick children at health facilities. The survey provides elements from surveys previously conducted separately for specific program areas.

- **Measuring Maternal Mortality from a Census: Guidelines for Potential Users**

  One of the challenges in addressing maternal mortality is measuring the rate of it accurately due to limitations in the data. In November 1998, MEASURE Evaluation held a workshop in Nairobi in order to evaluate the use of the census for maternal mortality measurement. Experts who were involved in data collection and those who were experienced with comparative demographic data analyses participated in the workshop. This publication presents on the discussions and findings of this workshop. Experiences with measuring maternal mortality using a census in developing countries are shared and recommendations are provided for using the census methodology for maternal mortality estimates.

This manual is intended to build an understanding of the what, why, and how of evaluation, guiding users in both designing and implementing evaluations of HIV/AIDS prevention projects. The manual is designed to provide an introduction to evaluation with sections on concepts and definitions, designing an evaluation, data collection methods, and data management and analysis. Additionally, a series of 12 HIV/AIDS related projects are presented and their associated evaluation described.

- **Outcomes for Success!**

  This handbook describes outcome-based evaluation.

- **Conducting a Participatory Evaluation**

  This document explain how and why to conduct participatory evaluation.

- **Project Midterm Evaluation Guidelines**

  This document is the project midterm evaluation guidelines for the CARE Population Program. Contrary to traditional evaluations that are externally facilitated, this participatory evaluation is conducted by a core evaluation team that facilitates a collaborative effort among all stakeholders to assess the successes and failures of the project and determine future actions. The document provides a step by step process for conducting a midterm evaluation, and includes an appendix with template documents and examples of project implementation topics to be addressed, data presentation formats, data collection methods and instruments, and a suggested evaluation report outline. Although this document is very specific to CARE, it can be modified.

**Sustainability and Scale-Up**
If outcome and impact evaluation shows that a health program has indeed caused positive changes in people’s behaviors or in health outcomes, the final step in the M&E staircase is to determine if the program is sustainable—that is, whether a sense of ownership in the program’s interventions has been established in the broader social and cultural context so that behavior changes continue over the long-term.

For programs to be sustainable, continuous interaction among all relevant stakeholders is necessary. Relevant stakeholders can include program staff, members of the target population, policy-makers, educators, program evaluators, funding agencies and the public-at-large.

Building and ensuring community partnership from the very beginning of program planning and implementation is one way that successful activities and programs can be sustained even after the primary external funding source ends. Community partnership and ownership are enhanced when community leaders show appreciation for the interventions and perceive the program as being effective and relevant in solving a recognized problem. Once community members recognize the benefits of the interventions, they may be willing to cooperate and support the processes involved.

By determining the successfulness of a program, M&E also permits an assessment of scalability. Scalability is defined as the potential of performing the intervention on a larger scale, for instance, by extending the intervention from one district to the entire state/region.

In determining scalability, it is important to assess whether the characteristics that made the program successful in a certain area or subpopulation are sufficiently present in the larger context. For instance, if distribution of bed nets to people in a particular area involves handing out explanatory pamphlets on their proper use, this may not be scalable in a large neighboring area where the language is different or the literacy level is very low. In that context, the project’s design may require changes before it becomes scalable. For example, the pamphlets would have to be translated or converted into pictures.

While expanding such initiatives, one must consider the challenges involved in replicability and thus fully plan for the time, resources and high-quality training required for successful program expansion. It is also important throughout such planning efforts to invest in knowledge management and transparent communication, so that insights discovered in the initial program can be spread more broadly. Thus, there is every chance that scaled-up projects will fulfill the objectives of the original program.

Resources:
A Resource Guide for Enhancing Potential for Sustainable Impact

This guide was developed to help practitioners enhance the sustainability of their programs' impact through practical guidance and tools that could be applied to existing program design and management processes. This Guide offers a useful resource that can help implementing organizations, local partners, donors, and other stakeholders better understand how a sustainability lens can be applied practically throughout the life cycle of a project through effective management, capacity strengthening, and implementation of practical transition strategies. Developed with a sectoral emphasis on food and nutrition security programs, its general principles can be applied across all sectors and types of programs.

Integrating Gender into Scale-up Mapping Tool

The tool provides program managers with a methodology to systematically integrate gender into scale-up initiatives. This tool focuses on addressing gender in the implementation and scale up of a best practice rather than integrating gender into the best practice itself.

Phase IV: Going to Scale with Successful Change Efforts

This part of the Guide to Fostering Change to Scale Up Effective Health Services highlights the monitoring and evaluation concerns when programs are scaled up.

Guide for Monitoring Scale-up of Health Practices and Interventions

This guide is intended to provide governments, donors, country organizations, and implementing partners with a low-cost and replicable approach to monitoring the process of scaling up innovations in health.

Monitoring and Evaluating Scale-up of Health System Innovations
This guide provides background information on scale-up theory and guidance for monitoring scale-up activities.

**Promising Practices in Scale-Up Monitoring, Learning & Evaluation: A Compendium of Resources**

Although a wealth of tested, practical methods, tools, and guidelines exist for planning, monitoring, and evaluating project-based sexual and reproductive health (SRH) interventions, there is less guidance for best practices to support scale-up efforts. The compendium is intended to 1) link the scale-up theory discussed in the briefing paper to field-based practice; 2) provide tools, ideas, and guidance for designing and implementing robust systems for monitoring processes and evaluating outcomes of scaling up innovations in an accessible, practical format; and 3) share SRH lessons learned on what worked well and not so well in the process. Where feasible, generic data collection tools are presented which can be adapted for use with other SRH innovations. Key references to additional materials and resources are also included.

**Guide to Fostering Change to Scale Up Effective Health Services**

This guide describes principles fundamental to effective change, highlights proven approaches to effective change, provides how-to steps for successful change including scale-up, describes key challenges of scaling-up and recommends strategies, tools or approaches for meeting these challenges and offers cases that show how the steps have been implemented in real-life situations.

**Scalability and Replicability: Two Very Different Challenges**

In this editorial, Mr. Giridhar addresses the challenges that often present when scaling up and/or replicating interventions and experiments, but stresses the importance of finding ways to forge ahead and expand on innovative initiatives despite the many potential barriers. Brief case examples are described to illustrate his points.

**Monitoring and Evaluation in Global HIV/AIDS Control**
Weighing Incentives and Disincentives for Coordination among Global and Local Actors

This paper discusses coordination efforts of both donors and recipient countries in the monitoring and evaluation (M&E) of health outcomes in the field of HIV/AIDS. The coordination of M&E is a much underdeveloped area in HIV/AIDS programming in which, however, important first steps towards better synchronisation have already been taken. In this paper, we review the concepts and meanings commonly applied to M&E, and approaches and strategies for better coordination of M&E in the field of HIV/AIDS. Most importantly, drawing on this analysis, we examine why the present structure of global health governance in this area is not creating strong enough incentives for effective coordination among global and local actors.

- **Strategies for More Effective Monitoring and Evaluation Systems in HIV Programmatic Scale-Up in Resource-Limited Settings: Implications for Health Systems Strengthening**

  The authors of this article discuss common challenges to monitoring and evaluating systems used in the rapid scale-up of HIV services as well as innovations potentially relevant to systems used to monitor, evaluate, and inform health systems strengthening.

- **Can Modeling of HIV Treatment Processes Improve Outcomes? Capitalizing on an Operations Research Approach to the Global Pandemic**

  Operations Research (OR) is the applied science of maximizing the effective use of limited resources. This paper presents a review of the many logistical and operational problems that have limited the global scale-up of HIV care and antiretroviral treatment for people with AIDS. The authors identify and describe OR techniques that could be used to address the barriers to scaling up HIV care and treatment.

- **Sustainability Science: An Integrated Approach for Health-Programme Planning**
The authors of this article conducted a systematic review of conceptual frameworks and empirical studies about health-program sustainability in an effort to develop a framework for understanding health-program sustainability; and to use the framework to propose an approach to planning for health-program sustainability.

- **Adapting Life-Cycle Thinking Tools to Evaluate Project Sustainability in International Water and Sanitation Development Work**

This paper presents a framework for identifying and analyzing factors that affect sustainable development of water and sanitation projects. Five common sustainability factors are identified and a life-cycle approach is used to assess how project sustainability can be improved throughout the project life. Together, the sustainability factors and life-cycle stages form an assessment matrix used to score the sustainability of a project.

- **Performance of Predictors: Evaluating Sustainability in Community-Directed Treatment Projects of the African Programme for Onchocerciasis Control**

This paper presents an analysis of participatory sustainability evaluations conducted for 41 African Program for Onchocerciasis Control projects. The evaluation specifically looked at predictors of sustainability of community-directed treatment with ivermectin (CDTI) at four implementation levels. The results suggest that community ownership is one of the important determining factors of sustainability of community-based programs.

- **ExpandNet**

ExpandNet is a global network of public health professionals and scientists seeking to advance the practice and science of scaling up successful health innovations tested in experimental, pilot and demonstration projects.

- **Measuring Family Planning Sustainability at the Outcome and Programme Levels**
This paper examines the validity of two indices of sustainability, family planning program sustainability and outcome sustainability, and discusses the potential for the indices to be used as a policy tool to inform funding decisions.

Frameworks

Frameworks, sometimes referred to as models, provide a basic conceptual structure to explain a complex issue and outline a possible course of action to solve a problem. Health programs use frameworks to clarify program goals and objectives and explain the relationship between activities and goals. Frameworks also help identify appropriate indicators to monitor and evaluate the health program. A conceptual framework is used to help design a sound health program by identifying the theoretical basis for the program’s approach. The other three frameworks are commonly used to inform program design as well as guide program implementation and management.

Four types of M&E frameworks dominate the public health field:

Conceptual frameworks are also known as theoretical or causal frameworks. They inform health program design by making explicit connections between relevant contextual factors and the purpose of the program; clarify the ?why? and ?how? questions of program operation and design; and guide the selection of appropriate indicators.

Results frameworks are also known as strategic frameworks and are commonly used by projects funded by the U.S. Agency for International Development (USAID). They serve as a management tool with an emphasis on results. The purpose of results frameworks is to increase focus, select strategies, and allocate resources accordingly.

Logical frameworks are also known as LogFRAMEs and are commonly used by projects funded by the United Nations (UN). They help set clear program objectives and define indicators of success. They also outline the critical assumptions on which a project is based, similar to the results framework.

Logic models are also known as M&E frameworks and are commonly used by projects funded by USAID or the UN. The purpose of logic models is to present a clear plan for the use of resources to meet the desired goals and objectives. They are a useful tool for presenting programmatic and evaluation components.
The choice of a particular type of framework—whether a conceptual framework, results framework, logical framework or logic model—depends on the program’s specific needs, the M&E team’s preferences and donor requirements. Read more about the types of frameworks and see examples by clicking on the links in the right hand sidebar.

**Conceptual Framework Guides and Examples**

Conceptual frameworks are also known as theoretical or causal frameworks. They:

- inform health program design by making explicit connections between relevant contextual factors and the purpose of the program;
- clarify the *why*? and *how*? questions of program operation and design—that is, the causal links between program activities and objectives while defining the underlying assumptions made to achieve program goals; and
- guide the selection of appropriate indicators.

The figure below is an example of a general conceptual framework showing how a health program fits into the broader context and contributes toward improving a health condition. Conceptual frameworks account for non-program factors that might influence program success, and thus are useful in guiding program design as well as impact analysis. For an example of a conceptual framework for family planning programs, see page 16 of the Handbook of Indicators for Family Planning Program Evaluation.

![Conceptual Framework Diagram](image)

**Resources:**

- **HRH Action Framework**

  This framework is designed to assist governments and health managers to develop and implement strategies to achieve an effective and sustainable health workforce. By using a
comprehensive approach, the framework will help you address staff shortages, uneven
distribution of staff, gaps in skills and competencies, low retention and poor motivation,
among other challenges. The website provides an interactive overview of the framework with
supporting tools, guidelines and resources, as well as country examples and critical success
factors.

• **Integrating Human Rights and Gender Equality in Evaluation - Toward UNEG Guidance**

  Highlights the need for people centered evaluation and for evaluators to consider human
  rights and gender equity. This handbook addresses gaps in tools and frameworks that reflect
  these topics.

• **W.K. Kellogg Foundation Evaluation Handbook**

  This evaluation handbook provides a framework for thinking about evaluation as a relevant
  and useful program tool rather than a unique event at the end of the program. Written
  primarily for W.K. Kellogg Foundation-funded projects, this handbook is intended for use by
  project directors and project staff with evaluation responsibilities. The guide is composed of
  two parts - Part 1 presents the Foundation's evaluation approach, and Part 2 provides a
  blueprint for planning, designing and conducting project-level evaluations. Name and email
  required for free download of resource.

**Results Framework Guides and Examples**

Results frameworks, also known as strategic frameworks, are commonly used by projects funded
by the U.S. Agency for International Development (USAID). They serve as a management tool
with an emphasis on results. The purpose of results frameworks is to increase focus, select
strategies, and allocate resources accordingly. They generally have an overarching strategic
objective (SO) that the program aims to achieve through key intermediate results (IRs), while
explaining the cause-effect links that will lead from a program activity to the proposed objective.
The results framework also includes the critical assumptions that must hold true for the strategy
to be valid.

The figure below is the general format of a results framework. For an illustrative results
framework to increase famers’ production, see page 9 of Performance Monitoring and
Evaluation TIPS: Building a Results Framework.
Resources:

- **Understanding the Essential Nutrition Actions (ENA) Framework**

  This brief outlines the ENA framework and provides materials and other training materials on nutrition frameworks.

- **Designing a results framework for achieving results: A how-to Guide**

  This guide provides how-to guidance for developing results frameworks and also provides various examples of results frameworks used at various levels.

- **TIPS: Building a Results Framework**

  These TIPS provide practical advice and suggestions to USAID managers on issues related to performance monitoring and evaluation.

- **Using the Results Framework Approach**

  This resource describes what a results framework can be used for and outlines a process for developing a results framework.

**Logical Framework Guides and Examples**
Logical frameworks, also known as LogFRAMEs, are commonly used by projects funded by the United Nations (UN). They help set clear program objectives and define indicators of success. They also outline the critical assumptions on which a project is based, similar to the results framework. However, the logical framework includes additional information, namely, it accounts for the resources required to implement a program, the key activity clusters of a program and the means for verifying project accomplishments.

The following matrix is an example of a logical framework, including definitions of terms. For a specific example of a logFRAME for a program to end child labor, see page 24 of A Guide for Developing a Logical Framework.

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Performance Indicators</th>
<th>Means of Verification</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal:</strong> The broad impact that the project will contribute to at a sectoral/national level</td>
<td>Measures the project’s contribution toward meeting the goal; for evaluation purposes</td>
<td>Data sources and collection methods</td>
<td></td>
</tr>
<tr>
<td><strong>Purpose:</strong> The expected outcome toward which all program components are aimed</td>
<td>Determines that the purpose of the project has been achieved and results are sustainable; for project completion and evaluation</td>
<td>Data sources and collection methods</td>
<td></td>
</tr>
<tr>
<td><strong>Component Objectives:</strong> The expected outcome from each output</td>
<td>Determines attainment of component objectives; for review and evaluation</td>
<td>Data sources and collection methods</td>
<td></td>
</tr>
<tr>
<td><strong>Outputs:</strong> The direct results (goods and services) which are measured by the project</td>
<td>Measures quantity, quality and timing of outputs; for monitoring and review</td>
<td>Data sources and collection methods</td>
<td></td>
</tr>
<tr>
<td><strong>Activities:</strong> The project tasks that deliver outputs</td>
<td>Measure program targets; for monitoring</td>
<td>Data sources and collection methods</td>
<td></td>
</tr>
</tbody>
</table>

Resources:

- How to Note: DFID Guidance on Using the Revised Logical Framework

This guidance document developed by DFID aims to help DFID-funded programmes make the best use of the logical framework (logframe) in designing and managing projects, by:
Helping you design high-quality logframes with clear starting points and targets, strong internal logic, and a strong results focus.

Ensuring project officers and advisers have all the necessary qualitative and quantitative information needed to be able to monitor progress and measure performance throughout the life of the project.

Ensuring DFID staff involved in the consultation and approval process have all the necessary information needed to be able to take informed decisions about the likely success of the project.

Ensuring DFID has robust qualitative and quantitative information to be able to report to the UK public the results achieved with taxpayers’ funds, to strengthen project management capacity among partners (demonstrating what success looks like), and to provide evidence of progress to stakeholders.

Ensuring the logframe contains all the necessary detail against which DFID and its partners can monitor project progress as well as measuring and evaluating impact.


The Logical Framework (Logframe) is the core reference document throughout the entire project management cycle. The Logframe has been in use at the World Bank since August 1997, when it became a standard attachment to the Project Appraisal Document for investment operations. Created in 1969 for the US Agency for International Development, it was used widely throughout the bilateral donor community in the 1970’s and 1980’s. Practitioners in most development management organizations have explored the power of the Logframe to create clear objectives and build commitment and ownership among clients. Over the years, the Logframe evolved as a core technique for managing the complete project cycle from design, to implementation, monitoring, and evaluation. This handbook summarizes the rationale and essential elements of the Logframe for practitioners. It is organized as a step-by-step user’s resource guide, detailing how to design a project, how to design a quality checklist, demonstrating the use of the Logframe with different Bank loan instruments, offering a summary of tips and providing specific references, and providing sample project designs.

W.K. Kellogg Foundation Logic Model Development Guide

The Logic Model Development Guide is a comprehensive resource that focuses on the development and use of program logic models for program planning and evaluation. It provides an overview of logic models as an action-oriented tool for program planning and
evaluation, examples and exercises for logic model building, and further instructions and exercises for developing advanced models. The appendix includes blank templates for developing your own logic model and further resources and references. Name and email required for free download of resource.

- **A Guide for Developing a Logical Framework**

This guide describes how the Logical Framework can be used as a tool to help strengthen project design, implementation, and evaluation. A step-by-step process for using the Logical Framework approach to design a project is included as well as a review of the advantages and limitations of the approach.

**Logic Model Guides and Examples**

Logic models are also known as M&E frameworks and are sometimes referred to as logical frameworks. In general, the logic model is similar to a logical framework, but it is presented differently. They are commonly used by projects funded by USAID or the UN.

The purpose of logic models is to present a clear plan for the use of resources to meet the desired goals and objectives. They are a useful tool for presenting programmatic and evaluation components.

An underlying assumption of logic models is that there is a linear relationship flowing from program inputs to processes/activities, which, in turn, result in outputs that ultimately lead to long-term outcomes and impact. Inputs, processes and outputs pertain to what the program does while outcomes and impact pertain to what the program sets out to accomplish.

- **Inputs:** The resources invested in a program, for example, technical assistance, financial resources, infrastructure and equipment.
- **Processes:** The activities carried out to achieve the program’s objectives, such as training and outreach.
- **Outputs:** The immediate deliverables of a program achieved through implementation of activities, such as providers trained or bed nets distributed.
- **Outcomes:** Short-term and intermediate results at the population level achieved by the program through the implementation of program activities, such as changes in people’s knowledge, attitudes or behavior.
- **Impact:** The long-term effects of a program, for example, changes in health status.
The following figure outlines the primary components of a logic model. For sample logic models for HIV voluntary counseling and testing (VCT) programs, see Sample Logic Model for VCT Program Implementation and Technical Assistance.

Ideally, health program planners and managers will develop a framework or model during the program planning stage, after they have articulated the health problem and contributing factors and identified potential solutions. The framework is comprised of the activities, outputs, outcomes and impacts that the program managers intend to change over the life of the program. A framework also helps program managers identify appropriate indicators that the M&E team will track to ensure that the program activities are leading to the end goals. If a program manager begins to implement activities before a particular framework has been established, it is still useful to construct a framework to map out these important considerations.

Resources:

- **Basic Terminology and Frameworks for Monitoring and Evaluation**

  This book provides a basic introduction to the fundamentals of M&E, including most commonly used terms in M&E. While not intended to be a comprehensive how-to guide, it provides a concise explanation of commonly used terms and frameworks in current M&E practice to encourage a common understanding between M&E professionals, policy-makers and program managers alike. Though it uses HIV as its focus, the M&E fundamentals described here, are also relevant to other areas of public health and development.

- **Logic Models: A Tool for Telling Your Programs Performance Story**

  The Logic Model describes the logical linkages among program resources, activities, outputs, customers reached, and short, intermediate and longer term outcomes; it can be used to guide program monitoring and evaluation. This paper is intended to assist program managers in developing a logic model for their program by describing a Logic Model process in detail.

- **Using a Logic Model to Focus Health Services on**
Population Health Goals

This article describes an application of program logic models to help regional health authorities focus attention and efforts on health outcome goals in British Columbia. The article emphasizes the value of graphic modeling techniques such as logic models in identifying the presumed contribution to regional health status of health services and other health determinants. It argues that logic models facilitate overall governance of health care services by creating performance-monitoring frameworks for both short-term and long-term outcome objectives. [Abstract]

• The Utilization of the Logic Model as a System Level Planning and Evaluation Device

This paper presents the use of a logic model for evaluating the impacts of local human services delivery systems and describes the experiences of a large, urban United Way.

• Facilitating the Shift to Population-Based Public Health Programs: Innovation Through the Use of Framework and Logic Model Tools

This paper outlines how logic models have been adapted within a health promotion framework to guide public health programs and facilitate program description.

• Sample Logic Model for VCT Program Implementation and Technical Assistance

This resource provides sample logic models for VCT Program Implementation and VCT Technical Assistance.

Indicators
An indicator is a variable that measures one aspect of a health program. The monitoring and evaluation (M&E) team uses indicators for:

- **monitoring** health programs to show that program activities are being carried out as planned; and
- **evaluating** health programs to show that a program activity has caused a change in a particular behavior or health outcome.

Monitoring and evaluation generally use five types of indicators to measure different aspects of program performance. Monitoring focuses primarily on the first three categories of indicators, while evaluation focuses largely on the last two categories.

- **Input indicators** include indicators that measure the human and financial resources, physical facilities, equipment and supplies that enable implementation of a program. For example, data on an input indicator can tell whether supplies are coming in on time.

- **Process indicators** reflect whether a program is being carried out as planned and how well program activities are being carried out. Such indicators could, for example, focus on training staff or counseling clients; for instance, they give program managers an explanation of why one clinic receives more clients than other clinics. Process indicators are often reported in the form of a number, for example, number of training sessions organized or number of educational materials developed.

- **Output indicators** report on the results of program efforts (inputs and processes/activities) at the program level. They inform us about the direct products or deliverables of program activities and are usually reported as numbers, for example, number of providers trained or number of bed nets distributed.

- **Outcome indicators** measure the program’s level of success in improving service accessibility, utilization or quality. These types of indicators are often reported as percentages or rates, such as the percentage of the population with knowledge of HIV/AIDS, Tuberculosis and long-acting contraception. Data for outcome indicators often come from censuses, surveys or surveillance systems. These data sources typically provide data on both numerators and denominators, needed to calculate the necessary percentages to measure outcome indicators.

- **Impact indicators** measure the long-term, cumulative effects of programs over time on the larger social system or on a population’s health and well-being, such as changes in fertility rates, HIV infection and infant mortality rates. Such impacts are increasingly becoming difficult to attribute to a single program. Rather, a program may contribute to impacts at the population-level together with other programs.

Five characteristics define **SMART Indicators**:

- **Specific** - focused and clear
- **Measurable** - quantifiable and reflecting change
- **Attainable** - reasonable in scope and achievable within set time-frame
- **Relevant** - pertinent to the review of performance
A health program should select at least one indicator for each significant aspect of the program, including each significant input, output or overarching program objective. The selected indicators should link to the program’s framework. Also, a program should consider resources needed to collect and analyze data for each indicator. A program can, and most likely will, use multiple sources of data to measure its selected indicators, such as censuses, surveys, service statistics, qualitative research and administrative records. Indicators can also be selected based on the requirements of other agencies, such as the government and donor agency.

Guidelines and examples of indicators exist for several health areas, for example, for family planning, and HIV/AIDS. These indicator lists are continually updated based on the latest evidence and knowledge in the field. Thus, it is important to review the latest list of relevant indicator lists when selecting the specific ones to monitor and evaluate a chosen program. These indicator guides also contain numerous indicator reference sheets.

Once specific indicators have been identified, it is helpful to choose and edit or develop an indicator reference sheet for each indicator. An indicator reference sheet gives a detailed account and definition of the selected indicator along with a brief justification for selecting that specific indicator. It outlines the numerator and denominator used to measure the indicator and explains the details relating to the data that will be used?the data source, frequency of collection and even the person(s) responsible for this process. Plans for data collection, analysis, reporting and review are all outlined in this reference sheet. It also includes an indicator table that consists of baseline values and targets. Data quality issues related to the collection of the specific indicator can also be included; this ensures that data of the highest quality possible are collected, recorded and analyzed. See sample indicator reference sheet.

Identifying appropriate indicators for each step of the M&E process, measuring them and reporting on them is an integral process of M&E, regardless of the program’s size. Explore examples and guidelines for choosing indicators by health topic by clicking on the subpages in the right hand navigation.

General Health

The General Health Indicator resources provide examples of and guidelines for indicator selection and use. The resources included on this page serve one of two functions: 1) provide general guidance on indicators or 2) provide examples of indicators that do not fit neatly into the other health area specific indicators included on the additional subpages in the right hand navigation. These resources can be used to help identify appropriate indicators for each step of the M&E process and provide guidance on how to measure them.

Resources:
Global Reference List of 100 Core Global Health Indicators

The Global Reference List, developed through a collaboration between the WHO, international and multilateral partners, and countries, aims to better and more efficiently align reporting requirements for global health agencies. The Global Reference List contains indicators prioritized by the global community on health situations and trends at global, national, and regional levels. Included in the list are multiple health status indicators, risk factor indicators, service coverage indicators, and health system indicators. Also included is an indicator reference sheet with further details for each of the 100 indicators.

Trafficking in Persons and Health: A Compendium of Monitoring and Evaluation Indicators

This compendium is intended to assist program managers and decision-makers to plan, monitor, and evaluate their response to trafficking and health. It is designed to be a menu of options to select indicators that are most applicable to their programs and health facilities, including programmatic areas such as health sector preparedness, post-trafficking assistance programs' response to health, referrals and policies related to health, and the health status and care received by individuals who have been trafficked.


Intended for field offices, implementing partners, the donor community, and host country counterparts, this guide provides clear monitoring and evaluation definitions, global indicators and country-level indicators for the US Government global health principals: gender, health system strengthening, integration, partnerships, research and innovation, and sustainability. This guide includes an introduction to each principal, the results framework, specific indicators, and indicator reference sheets.

Indicators
This website includes 331 indicators from the World Development Indicators (WDI) covering 209 countries from 1960 to 2008. The indicators are available in Spanish, French and Arabic.

- **A Comprehensive Global Monitoring Framework (Noncommunicable Diseases)**

  Discussion paper that outlines a comprehensive global monitoring framework (including indicators and examples) for noncommunicable diseases.

- **Measuring Service Availability and Readiness: Core Questionnaire, Service Readiness Indicators and Service Availability Indicators**

  The service availability and readiness assessment (SARA) methodology builds upon previous and current approaches designed to assess service delivery including the service availability mapping (SAM) tool developed by WHO, and the service provision assessment (SPA) tool developed by ICF International under the USAID funded MEASURE DHS project. SARA is designed as a systematic survey to assess health facility service delivery. The SARA survey is designed to generate a set of core indicators on key inputs and outputs of the health system, which can be used to measure progress in health system strengthening over time. The basic approach to SARA is to collect data that are comparable both across countries and within countries (i.e. across regions and/or districts). The three main focus areas of SARA include service availability, general service readiness, and service-specific readiness.

  The SARA training tools available include: a reference manual, implementation guide, core questionnaire, indicator index, and compendiums of the service availability indicators and service readiness indicators.

  **Reference Manual:** The reference manual provides an overview of the SARA survey methodology and implementation, the core questionnaire, data verification tool and the indicator index.

  **Implementation Guide:** The implementation guides contains comprehensive information for planning and methodology, sampling, questionnaire adaption, CSPRO for SARA, data collection guides for data collectors and supervisors, data processing and analysis and output.

  **Core questionnaire:** The SARA core instrument broken down into sections that are covered, such as Cover Page, Staffing, Infrastructure, and Available Services among others.
Indicators Index: This index makes it easier to identify which questions in the questionnaire correspond to the specific indicators. Labelled with specific IDs, the indicators are organized under the following sections: general service availability, general service readiness, and service specific availability and readiness indicators.

Service availability indicators: A compendium of the service availability indicators meant to measure the physical presence of the delivery of services, encompassing health infrastructure, core health personnel, and service utilization.

Service readiness indicators: A compendium of the service readiness indicators meant to measure the availability of components required to provide services, such as basic amenities, basic equipment, standard precautions for infection prevention, diagnostic capacity and essential medicines.

Human Resources for Health (HRH) Indicator Compendium

This compendium provides a list of published indicators on human resources for health (HRH) organized according to the results framework of the CapacityPlus project. The objective of this compendium is to provide a tool for HRH systems strengthening practitioners interested in monitoring HRH projects and programs.

Monitoring the Building Blocks of Health Systems: A Handbook of Indicators and Their Measurement Strategies

Increased attention to the strengthening of health systems would not be sustainable in the absence of a sound monitoring strategy that enables decision-makers to accurately track health progress and performance, evaluate impact, and ensure accountability at country and global levels. This handbook describes a set of indicators and related measurement strategies, structured around the WHO framework that describes health systems in terms of six “building blocks”: service delivery, health workforce, information, medicines, financing and governance.

Guidance for Selecting and Using Core Indicators for Cross-Country Comparisons of Health Facility Readiness to Provide Services
Using uniformly defined core indicators for health-service provision will facilitate the assessment of health service delivery at the national level and will encourage the production of nationally representative and comparable datasets. This document provides a list of recommended core indicators intended to assess the functionality of a health system.

**Measuring Mortality, Nutritional Status, and Food Security in Crisis Situations: SMART Methodology**

The basic indicators for assessing the severity of a crisis are mortality rate and the nutritional status of a population. The SMART Methodology provides a basic, integrated method for assessing nutritional status and mortality rate in emergency situations. This manual is designed to provide agencies with the basic tools to collect the data necessary for planning direct interventions in an emergency setting.

**SMART/SPICED Indicators**

"How do we know whether we are exactly on track in getting where we exactly want to be at the end?" This toolkit provides an introduction to indicators, explaining the concept and aspects of specific indicators, offering suggestions on how to formulate indicators, and providing several examples of indicators throughout the text.

**F Indicators - Investing in People: Indicators and Definitions**

This document describes a wide variety of indicators for many different health areas.

**Compendium of Gender Scales**

In March 2010, C-Change convened a working group of researchers with expert knowledge of gender scales to review those scales in current use. The participants identified scales that measure adherence to gender norms and reviewed how they have been used to measure the success of interventions in changing these norms. The working group enthusiastically supported the creation of an online compendium of gender scales. They saw the value of
making it easily accessible by health and development practitioners, who may want to use these tools to assess gender-related attitudes and beliefs and evaluate their interventions. Scales selected for the compendium have been tested for their ability to measure gender attitudes and predict behaviors of interest, such as gender-based violence and partner reduction.

HIV/AIDS and Tuberculosis

The resources included on this page provide examples of indicators that are specific to HIV/AIDS and Tuberculosis (TB) programs. The indicator databases provide the user with indicators that have been previously validated and used specifically for HIV/AIDS and TB programs including core program indicators, drug regimens indicators, and youth indicators. The resources also provide information on how to effectively use the indicators for program monitoring and evaluation.

Resources:

- **Multidrug-Resistant Tuberculosis (MDR-TB) Indicators**

  This resource highlights the minimum set of indicators for the programmatic management of multidrug-resistant tuberculosis (MDR-TB) in national tuberculosis control programmes.

- **Guidelines on Construction of Core Indicators**

  This resource is intended to assist countries in reporting on their national HIV/AIDS response. A set of 25 core indicators are defined to facilitate standardized reporting, comparative analysis, and aggregate analysis of regional and global HIV/AIDS responses. The core indicators recommended are categorized as follows:

  1. National Commitment and Action
  2. National Knowledge and Behavior
  3. National-Level Program Impact

- **National AIDS Programmes: A Guide to Indicators for Monitoring and Evaluating National Antiretroviral Programmes**
As antiretroviral therapy (ART) programs scale-up to meet demand, monitoring and evaluation will assist with monitoring progress and refining approaches. This document describes an approach to monitoring and evaluating the scaling up of ART, including the provision of a list of core indicators. Each core indicator is defined and includes the rationale for its use and what it measures; how to measure it and the tools used for measurement; the frequency of measurement; and the strengths and limitations of each indicator.

- **National AIDS Programmes: A Guide to Indicators for Monitoring and Evaluating National HIV/AIDS Prevention Programmes for Young People**

This guide is intended for use by programme managers at the national level, particularly managers of national AIDS programmes. It may also be useful for programme managers and planners at subnational levels who seek to align their measurement efforts with national ones. This guide identifies a set of indicators, methods for measuring them, and their strengths and limitations. The purpose is to help national AIDS programme managers in planning and monitoring HIV prevention programmes for young people. The indicators are organized into four chapters in accordance with a logic model linking programmatic action to expected outcomes and, ultimately, to epidemiological impact.

- **Compendium of Indicators for Monitoring and Evaluating National Tuberculosis Programs**

To improve the quality and effectiveness of TB control programs, this compendium was developed to assist programs with monitoring and evaluating TB control activities. The compendium provides a comprehensive listing of the most widely used TB indicators relevant to developing countries and uses standardized terminology to facilitate consistent use of indicators across programs. In addition to providing a collection of TB control indicators, this resource provides an overview of monitoring and evaluation in general, an overview of monitoring and evaluation of TB control programs, and guidance on developing a monitoring and evaluation plan for TB programs.

This resource can also be found in the USAID TB Care I Toolbox.

- **National AIDS Programmes: A Guide to Monitoring and Evaluation**
This guide provides an overview of monitoring and evaluation of HIV/AIDS programs. The guide describes the use of indicators at different levels (international, national, district, and project level); the different functions of surveillance, monitoring, and evaluation; and the features of a good monitoring and evaluation system. Lastly, a series of key HIV/AIDS indicators for various areas are proposed and described.

- **HIV/AIDS Survey Indicators Database**

  The HIV/AIDS Survey Indicators Database is a comprehensive source of information on HIV/AIDS indicators derived from sample surveys such as the Demographic Health Surveys and Reproductive Health Surveys. The Database is an easy to use resource that produces data tables for specific countries by criteria identified by the user (i.e., by select background characteristics). Country Reports can also be easily generated based on selected criteria.

- **Indicator Registry**

  The Indicator Registry is a central repository of information on indicators used to track the AIDS epidemic and the national, regional and global response. The Registry can be searched by a variety of categories, by indicator, or by keywords.

**Malaria**

The Malaria Indicator resources included on this page provide examples of indicators that are specific to malaria programs. The indicator databases provide the user with indicators that have been previously validated and used specifically for malaria programs including indicators for The President’s Malaria Initiative.

**Resources:**

- **Malaria Social and Behavior Change Communication (BCC) Indicator Reference Guide**

  This second edition of the Malaria SBCC indicator guide aims to support partners involved in malaria prevention and control to evaluate the effectiveness of malaria BCC and to measure
levels of behavior change for malaria prevention and case management at the country level. The indicators are also useful for monitoring and designing malaria BCC interventions.

- **Household Survey Indicators for Malaria Control**

  This resource provides guidance on monitoring and evaluation of the updated objectives and targets of the Global Malaria Action Plan. It is also includes guidance for constructing indicators from household surveys, including using insecticide-treated nets and indoor residual spraying, intermittent preventative treatment during pregnancy, case management among children under five, and impact indicators.

- **Zambia National Malaria Indicator Survey**

  This report presents the results of the Zambia National Malaria Indicator Survey 2008, a comprehensive, nationally representative household survey designed to measure progress toward achieving the goals and targets set forth in the National Malaria Strategic Plan 2006-2010.

- **Monitoring and Evaluation Indicators to be used within The President’s Malaria Initiative**

  This resource includes a table with the full set of indicators to be used for monitoring and evaluation of the President's Malaria Initiative.

**Maternal and Child Health**

The resources included on this page provide examples of indicators that are specific to maternal and child health programs. The indicator databases provide the user with indicators that have been previously validated and used specifically for maternal and child health programs including indicators for programs focusing on orphans and vulnerable children.

**Resources:**

- **Indicators for assessing infant and young child feeding**
practices Part 2: Measurement

This document is a companion to the document Indicators for assessing infant and young child feeding practices. Part 1: Definitions published by WHO and partners in 2008. It provides tools for the collection and calculation of the indicators. It is intended for use by managers of large-scale population-based surveys that will collect information on the status of feeding practices among infants and young children less than 2 years of age.

- Monitoring Emergency Obstetric Care: A Handbook

Emergency Obstetric Care (EmOC) is the timely access to care for women experiencing complications during pregnancy, birth, or postpartum. This handbook presents a series of indicators designed to monitor EmOC interventions intended to reduce maternal mortality. The handbook is designed for practical use within health care facilities. A set of eight EmOC-related indicators are listed and the type of data and data collection processes are described. Forms and worksheets to assist with data collection and calculation are also included.


In an effort to better assess the needs of orphans and vulnerable children (OVC) and their household and to understand whether programs are making an impact in addressing the needs of OVC, the Child Status Index (CSI) was developed. The CSI is an easy-to-use tool to assess the current needs of a child, monitor improvements in specific areas of child well-being, and identify areas of concern that can be served by program interventions. The index gathers information in the following areas:

- Food/nutrition
- Shelter and care
- Protection
- Health care
- Psychosocial
- Education

This manual describes the CSI in detail.

- Tools: Key Indicators
The Key Indicators are a group of 17 recommended indicators that provide important information to monitor and assess maternal and child health interventions. The table of indicators is organized by intervention area (e.g., maternal and newborn care, immunization, control of diarrhea, etc.), with the recommended indicators defined and their calculation described.

- **Indicators for assessing infant and young child feeding practices Part 1: Definitions**

This document presents new and updated indicators to assess infant and young child feeding practices at household level. It is hoped that the indicators will be widely used in large-scale population-based surveys in countries to assess progress in the implementation of the Global Strategy for Infant and Young Child Feeding and to measure the coverage of effective nutrition interventions in young children.

**Reproductive Health/Family Planning**

The resources included on this page provide examples of indicators that are specific to reproductive health (RH) and family planning (FP) programs. The indicator databases provide the user with indicators that have been previously validated and used specifically for RH/FP programs including core program indicators, client exit interview indicators, and indicators for measuring sustainability. The resources also provide information on how to effectively use the indicators for program monitoring and evaluation.

**Resources:**

- **Demystifying Data: A Guide to Using Evidence to Improve Young People’s Sexual Health and Rights**

The Guttmacher Institute and the International Planned Parenthood Federation (IPPF) have launched a new publication designed to make accessible and contextualize a wealth of data on adolescent sexual health and rights in 30 countries, and to provide guidance on how to apply the data to advocacy, education and service provision efforts. The guide is designed to be a resource for youth advocates, sexuality educators and service providers as well as
others working to advance the sexual and reproductive health and rights of young people around the world.

• **An Advocate’s Guide: Strategic Indicators for Universal Access to Sexual and Reproductive Health and Rights**

  This guide enables advocates to use data when advocating for universal access to sexual and reproductive health rights (SRHR) at the national, regional and global levels. The guide’s inclusion of both quantitative and qualitative indicators is intended for advocates to better understand the process of generating concrete evidence on universal access to SRHR.

• **Family Planning and Reproductive Health Indicators Database**

  The Family Planning and Reproductive Health Indicators Database provides a comprehensive listing of the most widely used indicators for evaluating family planning and reproductive health programs in developing countries. For each indicator the Database includes: a definition, data requirements, data sources, the purpose, and any issues with the indicator.

• **Counting Abortions so that Abortion Counts: Indicators for Monitoring the Availability and Use of Abortion Care Services**

  This article describes Safe Abortion Care (SAC) services – contraception and safe abortion to prevent and manage unwanted pregnancies, and prompt and proper treatment of complications. The article also includes a proposed model for monitoring the implementation of SAC services.

• **Quick Investigation of Quality: A User’s Guide for Monitoring Quality of Care in Family Planning**

  The Quick Investigation of Quality (QIQ) was developed as a low-cost and practical way to assist programs in routinely monitoring the quality of care (QC) in family planning programs.
The QIQ includes a list of 25 indicators that programs can use to assess (QC). The indicators can be measured by facility audit, observation or exit interviews. The 25 indicators together provide a comprehensive picture of QC within a facility.

- **Monitoring Quality of Care in Family Planning Programs: A Comparison of Observations and Client Exit Interviews**

  Monitoring quality of care in family planning programs is important, but can be challenging and complicated. The Quick Investigation of Quality (QIQ) was developed to monitor quality of care by using observations of client-provider interactions, exit interviews with clients, and facility audits. This article describes an analysis examining the comparability of results of the QIQ from observations and exit interviews of program clients in Ecuador, Uganda and Zimbabwe.

- **Indicators for Reproductive Health Program Evaluation**

  This resource includes a collection of key indicators identified for monitoring and evaluating reproductive health interventions within the areas of: 1) Safe Pregnancy, 2) STD/HIV, 3) Women's Nutrition, 4) Breastfeeding, and 5) Adolescent Reproductive Health Services. A review of the conceptual framework used for developing the list of indicators as well as a review of the issues with measurement and types of data sources for the indicators are included.

- **Handbook of Indicators for Family Planning Program Evaluation**

  This Handbook provides a comprehensive collection of indicators for evaluating family planning programs in developing countries. The indicators are organized according to the components of the Conceptual Framework of Family Planning Demand and Program Impact on Fertility developed by The EVALUATION Project. The components include:
  - Policy Environment
  - Service Delivery Operations
  - Service Output
  - Demand for Children
  - Demand for Family Planning
  - Service Utilization
  - Contraceptive Practice
  - Fertility
Health and Family Planning Indicators: Measuring Sustainability

Sustainability is often the ultimate goal of a program. This document provides a list of potential sustainability indicators for health and family planning programs. It is intended to guide program managers in selecting appropriate sustainability indicators during program design and program assessment activities. Each of the indicators in this document includes a detailed definition, narrative on its use and relationship to sustainability, and a proposed data source.

Water and Sanitation

The resources included on this page provide examples of indicators that are specific to water and sanitation programs. The indicator databases provide the user with indicators that have been previously validated and used specifically for water and sanitation programs including access and behavioral outcome indicators. The resources also provide background information on water and sanitation programming and information on how to effectively use the indicators for program monitoring and evaluation.

Resources:

- **WASH Sustainability Index Tool**

  The WASH Sustainability Index Tool can be used to assess the likely sustainability of WASH interventions. The objective of the Tool is to enable a quantitative assessment of the likely sustainability of WASH interventions using a range of both quantitative and qualitative indicators. The Tool is a general monitoring or process assessment tool, rather than being designed for impact evaluation. It is designed to assess the extent to which crucial sustainability criteria are being met across a range of indicators grouped under five main areas or factors: institutional, management, financial, technical and environmental.

  Resources available include:
  - WASH Sustainability Index Tool Cheat Sheet
  - WASH Sustainability Index Tool (Complete Version)
  - WASH Sustainability Index Tool (Limited Version)
  - Additional Sustainability Index Tool documents
  - WASH Sustainability Index Tool Webinar video and slides
Background Paper on Measuring WASH and Food Hygiene Practices: Definition of Goals to be Tackled Post 2015 by the Joint Monitoring Programme

Guide intended to help trainers teach program managers, staff and other decision makers the fundamental elements and techniques of M&E, with a focus on population and health programs. The document is divided into three modules: introduction to M&E, developing plans for M&E: frameworks, and developing plans for M&E: indicators and data systems.

• **Access and Behavioral Outcome Indicators for Water, Sanitation, and Hygiene**

  The content of this document reflects the evidence that has accumulated to date on how to measure in a reliable and valid way hygiene practices that are critical for the prevention of diarrheal disease and the reduction of child morbidity and mortality.

• **Water and Sanitation Indicators Measurement Guide**

  This Guide is intended to facilitate consistent measurement of a set of generic water and sanitation-related monitoring and evaluation performance indicators. For each indicator presented in this Guide, a definition is included along with a description on how to calculate the indicator, sources of data for the indicator, issues with the indicator, and target values for the indicator.

• **Health-Care Waste Management Rapid Assessment Tool**

  This rapid assessment tool is a part of an overall strategy developed by the World Health Organization that aims to reduce the disease burden caused by poor health care waste management through the promotion of best practices and the development of safety standards. This tool can be used to gather information to provide decision-makers, experts, and others with the necessary data to help develop a national action plan to manage health care waste.
Data Sources

Data for tracking indicators, when monitoring and evaluating health programs, can come from a number of sources.

Many of these data sources provide quantitative data (information expressed in numbers or percentages), but some also provide useful qualitative data (information documented in words or patterns). These types of data are complementary. Qualitative data provide answers to certain types of ?why? questions while quantitative data answer the ?how many? and ?how often? questions.

Quantitative Data

- Information that can be counted and expressed in numbers or percentages or as ranges or averages, such as the number of patients treated or percentage of deliveries assisted by a skilled attendant.
- Usually come from objective questions that are closed-ended, such as, ?Did you breastfeed your last child?? or ?Where did you obtain your current contraceptive method?? with a list of locations from which to choose.
- Strengths: Can be used to compare large numbers of different groups or program participants
- Limitations: Difficult to explain unexpected findings

Qualitative Data

- Respondents provide answers to broad questions, expanding on their thinking.
- Common collection methods: participant observations, in-depth interviews and group discussions
- Strengths: Provides greater depth in understanding attitudes, beliefs and practices of individuals and communities, particularly useful during the formative planning phase of a program; it is also useful in explaining unexpected findings.

Many health programs use a variety of data collection approaches during planning, monitoring and evaluation. Using more than one approach can help answer different questions. Collecting the same information using different approaches also helps to verify the accuracy of the information, particularly for evaluation?a technique called data triangulation.

Common data collection methods include:

- Surveys to collect data about people?s perceptions, opinions, ideas and behaviors (to a certain extent). Surveys are less accurate in measuring behavior because people may not be completely honest about what they actually do. Surveys can be structured (questions are closed-ended with a range of pre-determined responses from which the respondent can select) or semi-structured (a mix of closed-ended and open-ended questions). Key issues with conducting surveys include ensuring that the selected sample is representative of the given population and minimizing systematic bias and error in the survey?s content, design
and administration to survey respondents.

- **Interviews** are helpful in acquiring in-depth understandings of reactions to various experiences or people’s attitudes. For example, interviews would be better than surveys at collecting information about roles of team members or learning about steps in a particular work process.

- **Focus groups** bring together a small homogenous group of people to informally discuss specific topics under the guidance of a moderator. This group process tends to elicit more information on group norms than individual interviews because people engage with each other.

Read more about **common data sources, data triangulation, ensuring data quality and ethical guidelines** by clicking on the subpages in the right hand navigation.

**Common Data Sources**

Health programs commonly rely on two types of data sources:

- **Service environment data** provide information of operations at the service delivery point.
- **Population-level data** offer information about all people in the defined area. Detailed demographic data are often collected at this level.

Some of these data are collected on a routine basis for ongoing documentation of health care provision, particularly service environment data, while others are collected only periodically to meet a specific need.

**Service Environment Data Sources**

- **Routine health information systems (RHIS)** or **health management information systems (HMIS)** include data on service statistics collected by facility staff as part of their routine activities and sent to higher administrative levels for analysis.

**Strengths:** Data are collected continuously, data are generally consistent over time in type of data collected; data are abundant and do not require additional resources to collect.

**Limitations:** Data often lack details, such as background characteristics of the clients, quality of care; risk of double-counting repeat clients; potential lack of timely reporting; possible lack of feedback from the centralized information management hub to the reporting service delivery points; and duplication and waste among parallel health information systems. Data captures only those who visit facilities.

**Examples:** Number of cases of specific diseases, number of births, number of vaccinations

See the Performance of Routine Information Systems Management (PRISM) framework for tools to assess RHIS performance.
Health facility surveys are often conducted at the national level, funded by donors such as the World Health Organization or the U.S. Agency for International Development and performed every 5 to 10 years. These surveys provide audits on range, volume and quality of service delivery at public and private health facilities. Health facility surveys may review levels of health center staffing, medical stock and equipment in great detail.

**Strengths:** Timing can coincide with program planning or implementation to inform program design or midcourse corrections. However, if timing does not coincide, M&E staff may undertake a targeted health facility survey rather than depend on a national-level health facility survey.

**Limitations:** Sampling design and analysis may be complex; surveys can be expensive and time-consuming; survey information can rapidly become outdated unless it is repeated; for exit interviews or observational data, low client volume for some services may pose limitations on what can be learned from these surveys; it is often difficult to design evaluations using these types of data sources because data are collected too infrequently.

**Examples:** Often include facility audits, provider surveys, exit interviews and client-provider observations or mystery clients (sending a person to pose as a client to observe the quality of services provided).

**Population-based Data Sources**

- **Population-based surveys,** conducted occasionally among a representative sample of the population, can be used for baseline information during program planning, for comparative purposes or as supporting evidence to evaluate health outcomes and program impacts. These surveys can provide information on the population’s health knowledge, attitude and/or behaviors, household poverty or educational attainment.

**Strengths:** Carried out independently; no additional resources required to collect data. The selected population is representative of the general population and a wide range of outcome level indicators can be collected. Programs can design similar, smaller-scale community or district-level surveys based on the population-based survey instrument, ensuring that the measures and indicators have been validated in their region of interest. The surveys cover a wide range of health and demographic topics, are well-tested and generally of high quality.

**Limitations:** Data from population-based surveys may not be available at the level of program intervention, such as at the community, village or district level. Difficult to time an evaluation around timing of non-routine population-based surveys.

**Examples from developing countries:** USAID-funded Demographic and Health Surveys (DHS), UNICEF-Multiple Indicator Surveys (MICS)

**Examples from the United States:** Pregnancy Risk Assessment Monitoring System (PRAMS), the National Survey of Family Growth (NSFG), the Youth Risk Behavior Surveillance System (YRBSS), Behavioral Risk Factor Surveillance System (BRFSS)?all from the Centers for Disease Control and Prevention (CDC)
Lot Quality Assurance Sampling (LQAS) methodology is a sampling method originally developed to control the quality of output in industrial production processes by quality testing small random samples of manufactured batches (lots). If the number of defective items in the sample exceeds predetermined criteria, the entire lot is rejected. Applied to health programs, LQAS provides program staff a rapid surveillance technique that requires a sample of only 19 sample points in each of five lots (sub-areas). Staff collects data at baseline and at certain time-points during program implementation in order to compare findings for each sample lot to a set target, as based on simple calculations.

**Strengths:** Project staff can collect data easily because a relatively small number of sample points are needed; field managers can readily set and measure specific indicators and results can be calculated simply without need of robust statistical package, thus facilitating a decentralized use of data.

**Limitations:** While LQAS can be used to compare survey findings of a lot to a pre-set target level, interpretation is restricted to whether the target level has been met; the typical small sample size for LQAS surveys does not allow point estimates to be reported within a meaningful margin of error. Changes over time cannot generally be measured, unless values are extreme.

**Examples:** The LQAS methodology was implemented by MEASURE Evaluation to provide information on how to improve various health-related programs in Liberia. With the aid of household based surveys, across six counties, this methodology enlightened the Ministry of Health and other stakeholders on the specific health indicators that need further attention.

- **Censuses** are usually conducted at 10-year intervals with the entire national population covered. These provide data on age, sex, employment and educational characteristics of the population, among other information, which are basic considerations for targeting health program services and resources.
- **Epidemiologic surveillance systems** collect information on disease incidence, prevalence and transmission patterns. Along with controlled studies that test experimental drugs and medical devices, surveillance data can be used to develop more effective health programs.

**Other data sources include:**

- **policy-level data** that provide information on the policy environment, usually at the national level
- **spatial/geographic information** that can be linked to biophysical and environmental data to provide information on the context in which programs operate
- **biomarker data**, which are objective physical or biologic measures of health conditions, for example, through blood specimens, that can provide information on disease prevalence. More than 15 biomarkers have been added to DHS surveys in more than 30 countries, including tests for STIs, blood pressure, micronutrient deficiencies and environmental toxin exposure, to complement self-reported survey data.

**Resources:**
• **MEASURE DHS Mobile App**

MEASURE DHS mobile provides national-level DHS data for 25 key indicators across 90 countries, including fertility, family planning use, vaccination, childhood mortality, nutrition, HIV testing and prevalence, maternal health, ITN use, and some basic background data such as literacy, education, and access to electricity. The data can be viewed in a chart or a table to compare across countries or over time in countries that have had more than one DHS survey. These key indicators can also be viewed on a map.

• **E2G Mapping Tool Version 3**

E2G 3.0 is a free mapping tool from MEASURE Evaluation that allows you to create color-shaded maps in Google Earth using Excel spreadsheet data for administrative divisions (e.g., provinces and districts) without the need for a geographic information system (GIS). E2G 3.0 is now available in both English and French for 50 countries, with a focus on PEPFAR countries, and contains a variety of enhancements. The tool will enable decision makers, program planners and analysts at all levels to display their Excel-based data for administrative divisions on a color-shaded map. This can help overcome many of the barriers that have limited the use of mapping for decision support and M&E.

• **Geographic Tools for Global Public Health: An Assessment of Available Software**

There is a growing list of software options for those wishing to map data. Users in global public health often have little time or money to invest in developing the technical expertise and data required for mapping, and are therefore confronted with capacity and data constraints that can make mapping difficult to implement. This makes the process for selecting the most appropriate software especially challenging. In this guide, the MEASURE GIS Working Group evaluates the features and ease of use of five commonly used mapping applications: ArcGIS, Quantum GIS (QGIS), Epi Info, Google mapping tools (including Google Maps, Google Earth, and the related MEASURE E2G tool), and DevInfo.

• **GIS for Monitoring Scale Up**

Generally, GIS and mapping have been used for program planning, resource allocation, and
monitoring and evaluation (M&E) focusing on mapping unmet need for FP, and calculating and measuring program or facility reach and coverage. This section explores additional uses for GIS in FP and reproductive health, such as understanding accessibility and utilization of services, stock outs of commodities, and supply and demand for services and commodities.


The earliest decisions that lead to development projects are among the most critical in determining long-term success. This phase of project development transforms exciting ideas into project proposals, setting the stage for a variety of actions that will eventually lead (if all goes well) to desirable results. From deciding to propose a sanitation project in South Asia to selecting approaches that strengthen school management in South America, these decisions are the starting place of development. This book is your guide to having assessing needs and then making essential decisions about what to do next.

* Managing the Flow of Monitoring Information to Improve Rural Sanitation in East Java

This resource describes the development and implementation of a community-based participatory outcome monitoring system in East Java for monitoring progress toward open defecation free status and tracking changes in community access to improved sanitation. The system is designed to link community-based participatory monitoring data with a district-level database. The document reviews how the community-based participatory outcome monitoring system works and shares progress and lessons learned based on implementation to date.

* Biomarkers Manual

In population-based surveys, biomarkers help assess the prevalence or occurrence of diseases or conditions and can also be used at a macro level to measure the long-term effect of policies and programs. In the Demographic Health Survey, biomarkers are collected in order to report levels of specific diseases and conditions on a population level. In combination with classroom instruction and practical experience, this manual can be used to teach you how to collect biomarkers for the Demographic and Health Survey (DHS).
Lot Quality Assurance Sampling in Kenya

The desire within Kenya to guide program managers and policy makers toward informed decisions was the impetus for MEASURE Evaluation’s use of the lot quality assurance sampling (LQAS) methodology there. MEASURE Evaluation first used LQAS in Kenya in 2009 when it piloted the Child Survival Indicator Survey. The pilot study was undertaken in Kenya’s Western and Nyanza provinces in collaboration with the National Coordinating Agency for Population and Development (NCAPD) and the Division of Child Health.

Lot Quality Assurance Sampling in Liberia

MEASURE Evaluation began providing technical assistance in Liberia for a pilot study using the lot quality assurance sampling (LQAS) methodology in early 2011. The purpose of the study was to provide information for programmatic decision making on key health indicators at both the national and county levels. The four counties selected for the pilot test were Bomi, Bong, Lofa and Nimba counties; combined, they comprise one third of Liberia’s total population.

2011 Lot Quality Assurance Sampling Survey in Liberia

LQAS is a relatively rapid and inexpensive approach to data collection, and is primarily used for M&E purposes. Used to empower program managers to evaluate program performance, the LQAS method enables these managers to assess whether program objectives and targets have been achieved within a specific unit of interest (a geographical area, a facility, an organization, or any other catchment area). The LQAS data collection method provides a viable alternative to traditional surveys. The method allows for smaller sample sizes than standard probability surveys, and the lower associated costs allow for more frequent sampling. This report describes effective use of LQAS in Liberia.

Lot Quality Assurance Sampling for Monitoring Coverage and Quality of a Targeted Condom Social Marketing Programme in Traditional and Non-Traditional Outlets in India

This study reports on the results of a large-scale targeted condom social marketing campaign
in and around areas where female sex workers were present in selected parts of India. The paper describes the use of the lot quality assurance sampling (LQAS) method for routine monitoring of condom availability in the study sites. The researchers concluded that using LQAS was a simple and easy method that allowed for informed decision-making based on regular updates on the progress of condom availability within the defined coverage areas.

- **How Much Can a KAP Survey Tell Us about People's Knowledge, Attitudes, and Practices?**

The aim of this article is to discuss the appropriateness of KAP surveys in understanding and exploring health-related knowledge, attitudes, and practices, and to describe some of the major challenges encountered in planning and conducting a KAP survey in a specific setting.

- **Lot Quality Assurance Sampling Video Training Series**

This resource provides a series of six training videos focused on different aspects of lot quality assurance sampling.

- **Profiles of Health Facility Assessment Methods**

Health facility-based data, in combination with population-based data, can provide a full assessment of the functioning of a health system and its impact on population health. Facility-based data tells us what is happening at the service delivery level and can be used for monitoring facility-level performance and service quality. *Profiles of Health Facility Assessment Methods* is a compendium of instruments for collecting health facility-level data. A detailed overview of each instrument is provided.

- **LQAS Series: On-Line Workshop**

Lot Quality Assurance Sampling (LQAS) is a sampling method used to assess indicators at the sub-project level and involves baseline, mid-term and final evaluations as well as regular interim monitoring. This website provides tools and resources related to LQAS including an online workshop. The online workshop consists of a series of six recorded lectures. Presentation slides for each lecture are available.
Patient Monitoring Guidelines for HIV Care and Antiretroviral Therapy

These guidelines are intended to assist district-level and national-level HIV/AIDS program managers in developing and implementing patient monitoring systems. The guidelines include a list of essential minimum standard HIV care and ART patient monitoring data elements and describe how their collection will facilitate clinical care and measurement of agreed upon indicators. Examples of a generic patient monitoring system and specific country and project examples are included.

• Health Information System Reform in South Africa: Developing an Essential Data Set

The article describes the creation of an essential data set at the district level. This later resulted in the development of higher level essential data sets. Focus is on HIS.

• Qualitative Research Methods: A Data Collector's Field Guide

Qualitative data often provides rich contextual information and is increasingly used to inform programs, services, and interventions. This Guide is designed to be used as a tool for training data collectors in qualitative data collection methods and data management. The guide is divided into five modules:

○ Module 1 ? Qualitative Research Methods Overview
○ Module 2 ? Participant Observation
○ Module 3 ? In-Depth Interviews
○ Module 4 ? Focus Groups
○ Module 5 ? Data Documentation and Management

• Users' Guide on Planning and Managing a Quality Survey in Reproductive Health Programs

About monitoring quality of care. This Guide on planning and managing a quality survey documents the experience and lessons of the MSH Turkey Program in implementing seven quality surveys, and provides a sufficient level of detailed information so that other
international health programs can replicate similar surveys to improve the performance and management of family planning and other reproductive health programs.

- **Using Lot Quality Assurance Sampling to Improve Immunization Coverage in Bangladesh**

  The objective of this study was to determine areas of low vaccination coverage in five cities in Bangladesh (Chittagong, Dhaka, Khulna, Rajshahi, and Syedpur).

- **Qualitative Research for Improved Health Programs: A Guide to Manuals for Qualitative and Participatory Research on Child Health, Nutrition, and Reproductive Health**

  This guide describes some of the existing manuals for conducting qualitative research on health and provides information to help would-be users select the manuals that are most appropriate to their needs.

- **Assessing Family Planning Service-Delivery Skills in Kenya**

  This report demonstrates the use of Lot Quality Assurance Sampling (LQAS) to evaluate the technical competence of two cohorts of family planning service providers in Kenya trained with a new curriculum.

- **Using Lot Quality Assurance Sampling to Assess Measurements for Growth Monitoring in a Developing Country's Primary Health Care System**

  This article describes a study in Costa Rica in which lot quality assurance sampling (LQAS) was used during routine household visits to assess the technical quality of Costa Rican community-based health workers: (1) measuring and recording weights of children, (2) interpreting their growth trend, and (3) providing nutrition education to mothers. This study
demonstrates the strength of LQAS for easily identifying poorly functioning components of growth monitoring and promotion.

- **Conducting Key Informant Interviews**

  This document describes how to conduct key informant interviews.

- **Public-Use Datasets Guttmacher Center for Population Research Innovation and Dissemination**

  A high priority for the Guttmacher Center for Population Research Innovation and Dissemination is to make available to the research community datasets created by Guttmacher Institute researchers. These datasets span the range of topics in the area of sexual and reproductive health. Datasets currently available include:
  - 2010 Survey of U.S. Publicly Funded Family Planning Clinics (Clinic Survey)
  - 2009 National Survey of Reproductive and Contraceptive Knowledge (USA)
  - 2008 Abortion Patient Survey (APS) (USA)
  - Protecting the Next Generation: Understanding HIV Risk among Youth study (Burkina Faso, Ghana, Malawi and Uganda)

- **Electronic Recording and Reporting for Tuberculosis Care and Control**

  As interest in electronic recording and reporting for TB care and control has grown substantially, so too has the demand for clear guidance on how to select, design, implement and maintain such systems. However, while agencies such as WHO, the United States Centers for Disease Control and Prevention (CDC), the KNCV Tuberculosis Foundation (KNCV) and Management Sciences for Health (MSH) have helped several countries to introduce electronic recording and reporting (often with a specific focus on MDR-TB) and have convened meetings to facilitate sharing of experience among countries that have implemented such systems, there has been no published guidance on the subject. This guide aims to fill that gap by providing practical advice for countries planning to introduce electronic recording and reporting systems, or to enhance existing systems.

- **Multiple Indicator Cluster Survey**

  This web page provides information on Multiple Indicator Cluster Surveys (MICS). The MICS is an international household survey initiative that collects data on women and children.
DHS Surveys

DHS supports a range of data collection options that can be tailored to fit specific monitoring and evaluation needs of countries. A few examples include Demographic and Health Surveys, AIDS Indicator Surveys, and Malaria Indicator Surveys.

Spatial Data Repository

The Spatial Data Repository provides geographically-linked health and demographic data from the MEASURE Demographic and Health Surveys (DHS) project and the U.S. Census Bureau for mapping in a geographic information system (GIS). On the website: 1) boundaries of DHS regions can be explored to visualize change over time, 2) data from DHS indicators and U.S. Census Bureau population estimates and projections can be downloaded in GIS format, and 3) users without GIS software can make interactive maps of DHS indicators at STATcompiler.

Data Triangulation

Data triangulation is when a piece of data or a finding can be verified with several different research methods or data sources, adding credibility to the findings.

- Requires planning, preferably prior to data collection
- Uses different data sources across different levels and time periods
  - Linkage over time (panel data) is done to examine program impacts while controlling for individual-level factors at the outset.
  - Linkage of couple-level data can be done, although there are both advantages and disadvantages to this approach.
  - Linkage of mother and child data is often done; linkage to father’s data is more difficult.
- Survey data sets (for example, household and facility information) can be linked to:
  - compare level of health services availability to health outcomes across geographical units
  - examine the effects of physical attributes on service utilization
  - create time series and panel data to help build causal explanations of program effects

In some cases, it is not appropriate to link data.

- It may not be necessary for some programs in a given context.
- If done with improper methodology or data sources, linking data can provide inaccurate findings.
- Linked analysis is more appropriate for evaluation than for monitoring.
Resources:

- **Framework for Linking Data with Action**

  The Framework for Linking Data with Action provides insight on how to align data resources with the decisions they would support, and vice versa. Through a combination of templates and process guidance, the tool serves three key purposes: to encourage both greater use of information in decision making, encourage better use of existing information and monitor the use of information in decision making. The tool helps program managers appreciate the need for good supporting data, helps data managers visualize how their work can be applied, and helps all stakeholders prioritize decisions and data collection activities.

- **Executive Summary: Rwanda Triangulation Project**

  The Executive Summary excerpt from the Rwandan HIV/AIDS Data Synthesis Project: Final Report summarizes the Rwandan Triangulation Project that was conducted from December 2007 to September 2008. The triangulation project was carried out to synthesize data from multiple sources to better understand 1) what the differences are in HIV prevalence among different population groups over time and what the potential causes are for these differences; and 2) whether there are gaps in HIV/AIDS programmatic coverage according to prevalence and/or need. The Executive Summary describes the findings of the triangulation project and presents recommendations for addressing HIV/AIDS among subpopulations.

- **The Utilization of Qualitative and Quantitative Data for Health Education Program Planning, Implementation, and Evaluation: A Spiral Approach**

  The authors of this article describe their process of developing a Dutch smoking prevention project and the use of both qualitative and quantitative research methods. The authors conclude and advocate for the use of mixed methods, as combining the two approaches results in a "synergistic effect", with the qualitative methods assisting in formulating ideas for improving quantitative data gathering, analyzing, and comparing ideas with respect to program development, and for testing the internal validity of a quantitative design.
Ensuring Data Quality

Collecting data for monitoring and evaluation of health programs in and of itself is insufficient. M&E staff must ensure that data are of good quality so that decision-makers will trust and use the data.

Good-quality data are:

- Accessible
- Accurate
- Complete
- Consistent across sources
- High integrity
- Precise
- Presented appropriately
- Relevant
- Reliable
- Sensitive
- Specific
- Timely
- Valid

Data quality checks, including data auditing and data quality assurance, ensure constant availability of good-quality data. Data auditing is more product-focused (better quality data) and investigative, while data quality assurance is more process-focused (better methods to get quality data) and exploratory.

Data Auditing

- A mechanism in which a sample of the reported data for a previous time period is compared on-site with that source's data records for the current time period
- Can be done either as an internal exercise for supervision and self-correction within a department or as periodic oversight by external, impartial examiners
- Often assumes that discrepancies in data quality are the result of deviations from the standard practice of data management
- Assessment methods used for data auditing:
  - Documentation review
  - Actual observations of data collection/processing
  - Triangulation with other data sources
  - Verification, cross checks and spot checks

Data Quality Assurance

- Examines how and why data variances exist and proposes methods to resolve them
- Collaborative process undertaken by reviewers and those being reviewed
- Touches on broad issues:
  - functions and capabilities of staff involved with data
  - consistency of understanding of data definitions by such staff
- consistency of their understanding and practice with data collection procedures and tools
- data management processes
- linkages between data sources and data users, both internal and external
- Data quality assurance findings are presented in terms of recommendations, and corrective action plans are proposed.

Resources:

- **International Planned Parenthood Federation Routine Data Quality Assessment Tool User's Guide**

  This user’s guide is a reference document designed to complement the International Planned Parenthood Federation (IPPF) Routine Data Quality Assessment (RDQA) tool. The RDQA approach to evaluating data quality was selected and adapted for use by IPPF’s member associations due to its flexible nature and its usefulness in identifying weaknesses in data quality flow. This user’s guide includes an overview of the IPPF RDQA tool and detailed guidance on the implementation and use of the tool. Instructions on using the tool can also be found within the tool itself.

- **Manual on Use of Routine Data Quality Assessment (RDQA) Tool for TB Monitoring**

  The Routine Data Quality Assessment (RDQA) tool is designed to assist TB program managers in assessing the quality of their data and data management system, and to monitor and improve their data management system in order to yield better quality data. Data and data systems are assessed according to five attributes: 1) accuracy-reliability, 2) completeness, 3) timeliness, 4) availability, and 5) integrity.

  This resource can also be found in the USAID TB Care I Toolbox.

- **Data Quality Assurance Tool for Program-Level Indicators**

  Data quality leads to improved program performance and to more efficient resource management and allocation. Although this resource was designed with a focus on the United States President’s Emergency Plan for AIDS Relief (PEPFAR), the content and tools included
for assessing and ensuring data quality can be used more generically as well.

- **Monitoring and Evaluation Systems Strengthening Tool**

  Guide for integrated PHE program managers. Sections that aid in developing M&E and provides types of evaluations, generic M&E terminology and major data sources and indicators.

- **Researching Violence Against Women: A Practical Guide for Researchers And Activists**

  Produced by PATH and the World Health Organization, this guide draws on the experience of researchers from more than 40 countries and presents methods for performing surveys and qualitative research on gender-based violence in low-resource settings. It covers all aspects of the research process, from study design to training field workers. It also describes ways to use findings to influence decision-makers. Most important, it presents clear guidelines for protecting the safety of women participating in the research.

  **Note:** Each chapter can be viewed or downloaded separately under the section "INDIVIDUAL CHAPTERS."

- **Guidance for Quality Assurance Project Plans**

  The Guidance for Quality Assurance Project Plans manual describes in detail the quality assurance project plan elements:

  - Project Management
  - Data Generation and Acquisition
  - Assessment and Oversight
  - Data Validation and Usability

- **Data Quality Assessment Data Verification Templates**

  MEASURE Evaluation has developed and applied a variety of tools to improve decision-making in the health sector. Many of the tools developed are designed to assist with assessing monitoring and evaluation plans and systems that collect and report program data. Here you will find Data Quality Assessment Data Verification Templates designed for assessing the quality of data generated by a program. All templates are available in English,
Ethical Considerations

At some point during health program implementation, research with people as study participants may be required—whether during the initial planning stages to gain an understanding of the health problems that the target population is experiencing, during program implementation to monitor progress of program’s activities, or during evaluation to assess whether the program has met its objectives.

When conducting such research, there are fundamental ethical issues that need to be considered for protecting the rights and welfare of the study participants, regardless of the country in which the research is performed.

Guiding principles include:

- **Respect for persons**: recognition of the personal dignity and autonomy of individuals, with special protections for those with diminished autonomy, such as children or prisoners

- **Beneficence**: the obligation to protect people from harm by maximizing anticipated benefits and minimizing potential risks of harm

- **Justice**: benefits and burdens of research should be distributed fairly. In other words, one segment of society—the poor or people of one ethnicity—should not be the only subjects in research designed to benefit everyone

Many countries have clear ethical guidelines and formal processes to obtain permission to conduct research involving human subjects, particularly when sensitive data is collected from study participants. For example, any research projects that receive funding from a U.S. government agency must comply with specific federal regulations, such as clearance by an institutional review board (IRB), regardless of where the research will be conducted. The research project may also need to obtain clearance from the host country’s local IRB or Ethics Committee if the research is conducted outside the U.S.

IRBs evaluate risks and benefits of the research to the study participants, adequacy of consent procedures and protection of confidentiality. Respecting participants’ privacy and ensuring confidentiality of their information are particularly important considerations.

- Researchers should not ask participants for their names without asking their permission first.

- The interview should be conducted in a place where the conversation cannot be overheard.

- After the information is collected, it must not be shared with anyone outside the study.
The research team should establish a data management plan to protect the privacy of the respondents' information after the survey is completed.

For more details about ethical considerations in research studies, see guidelines from the Office of Human Subjects Research at the National Institutes of Health.

Resources:

- Ethics

  This web page provides several training materials and publications related to the principles of research ethics.

- Bioethical Resources on the Web

  Bioethics Resources on the Web provides a compilation of web links to information for biomedical and behavioral researchers, health care professionals, research participants, patients and patient advocates, students and faculty in different disciplines, and the general public. With the aim of helping individuals and groups explore the vast array of issues in bioethics, the information accessible through this portal spans a wide range of topics, including human subjects and animal research, institutional review boards (IRBs; also known as research ethics committees), clinical ethics, international research ethics issues, genetics, and neuroethics, among others.

- Guidance on Ethics of Tuberculosis Prevention, Care and Control

  This document addresses a broad range of ethical issues arising in TB programs, ranging from informed consent and isolation to health care workers' rights and obligations, and clinical and epidemiological studies.

- Regulations and Ethical Guidelines

  This web page provides access to several documents focused on regulations and ethical guidelines.
Study Designs for Evaluation

Study designs for evaluating health programs often use a broad range of methods and procedures. The specific approach used should be based on the goals and objectives of the health program as well as the objectives of the evaluation. For example, is the evaluation intended to inform mid-course corrections? To inform future funding? To determine whether to scale up a program? The resources available to invest in the evaluation component of the program also influence the type of evaluation design.

Health programs often request summative evaluations, often referred to as outcome or impact evaluations. Summative evaluations assess the overall quality and impact of a program to help program planners, implementers, policy makers and funders ensure accountability, develop policy and decide on future funding.

Summative evaluation examines whether a program led to changes in behaviors and health outcomes at the population level, not just among the smaller group of program participants. Thus, determining causality is an important factor in summative evaluations—that is, whether one program or intervention produced a particular outcome.

To demonstrate causality, three requirements must be met:

1. The intervention must have begun before the changes in outcomes.
2. The outcome does not change in the absence of the intervention.
3. The evaluator can rule out all other possible causes for the changes in the outcomes.

Demonstrating what would have happened in the absence of the program (the ?counterfactual?)?the second and third requirements?presents challenges.

Three broad types of evaluation designs address the counterfactual in different ways:

In randomized experiments, study subjects (or groups) are randomly assigned to a group that receives the health program intervention (study or treatment group) or a comparison group that does not receive the intervention (control or non-treatment group).

Quasi-experimental designs use an intervention and comparison group, but assignment to the groups is nonrandom.

The non-experimental design lacks a comparison/control group, making it the weakest study design. Evaluators choose to use non-experimental designs when there are resource constraints, when they are unable to form an appropriate comparison group, or when a program covers the entire population and thus there is no comparison group.

In addition to deciding on the evaluation design for the health program, evaluators must also decide on the sampling method?how to select a subset of individuals from a population to estimate characteristics of the entire population.

To learn more about types of evaluation design and sampling methods and access related
Types of Evaluation Designs

Three broad types of evaluation designs, randomized experiments, quasi-experiments and non-experiments, address what would have happened in the absence of the health program (the counterfactual?) in different ways. Addressing the counterfactual is a requirement for demonstrating the health program caused changes in outcomes or impacts.

Randomized experiments, also called experimental design, are the most rigorous evaluation design, often referred to as the gold standard.

Pre-Test/Post-Test with Random Assignment to Intervention or Comparison Groups. In randomized experiments, study subjects (or groups) are randomly assigned to a group that receives the health program intervention (study or treatment group) or a comparison group that does not receive the intervention (control or non-treatment group).

Randomization ensures that the intervention and comparison groups are equivalent with respect to all factors other than whether they received the intervention. In other words, the comparison group serves as the counterfactual of what would have happened in the absence of the program—a key requirement in determining whether a program caused a particular health outcome.

Although considered the gold standard, randomized experiments often are not feasible in real-world scenarios.

- Practical difficulties arise in randomly assigning subjects to the intervention and comparison groups, and it may be unethical to offer the intervention to one group but not to another group.
- Spillover effects can result in the comparison group being exposed to the intervention.
- High rates of dropouts in the intervention or comparison groups can bias the results.
- Randomized studies are often expensive to implement, which may limit the feasibility of this
When randomization of subjects or groups is neither practical nor feasible, a **quasi-experimental design** can approximate the randomized experiment. Quasi-experimental designs use an intervention and comparison group, but assignment to the groups is nonrandom.

**Pre-Test/Post-Test with Non-Random Assignment to Intervention or Control Groups.** As with randomized experiments, for a pre-test/post-test quasi-experimental design, data are collected before and after the intervention. However, assigning subjects to the intervention and comparison groups is non-random. Thus, evaluators cannot assume equivalence between the two groups. Instead, they must assess the differences at baseline and account for any demographic or behavioral differences in the analysis.

Comparison groups in the quasi-experimental design can be identified through matching—a process of identifying individuals that are similar to the participants in the intervention group on all relevant characteristics, such as age, sex, religion and other factors associated with program exposure.

**Post-Test Only with Non-Random Assignment.** In some cases, data are not collected before the intervention. Instead, data are collected only after the program has ended among participants who had received the intervention and among non-participants, making for a weaker design. Matching participants and non-participants with similar characteristics and accounting for any relevant differences are especially important in the post-test only design to isolate effects of the intervention.

The **non-experimental design** is an intervention group only and lacks a comparison/control group, making it the weakest study design. Without a comparison group, it is difficult for evaluators to determine what would have happened in the absence of the intervention. Evaluators choose to use non-experimental designs when there are resource constraints, when they are unable to form an appropriate comparison group, or when a program covers the entire population and thus there is no comparison group, such as with a mass media campaign.

In non-experimental study designs, evaluators must have a clear conceptual understanding of
how the intervention was intended to influence the health outcomes of interest. Thus, the program team needs to develop a robust framework during the program planning phase.

There are four commonly used types of non-experimental designs:

- **In pre-test/post-test designs**, evaluators survey the intervention group before and after the intervention. While evaluators may observe changes in outcome indicators among the intervention participants, they cannot attribute all these changes to the intervention alone using this design because there is no comparison group.

- **Time-series designs** look for changes over time to determine trends. Evaluators observe the intervention group multiple times before and after the intervention and analyze trends before and after.

- The **longitudinal study** is another type of time-series design. Evaluators take repeated measures of the same variables from the same people. A panel design is a special type of longitudinal design in which evaluators track a smaller group of people at multiple points in time and record their experiences in great detail.

- In a **post-test only design**, evaluators observe the intervention group at one point in time after the intervention, focusing particularly on comparing responses of sub-groups based on such characteristics as age, sex, ethnicity, education or level of exposure to the intervention. This is the weakest approach.

Ways to strengthen the non-experimental design:

- **Measure participants’ level of exposure to the program**. If people with greater exposure to the program showed greater change in the outcomes, it strengthens the argument that the program led to changes. However, because the non-experimental design lacks a comparison group, changes in outcomes could still be due to selection bias—that is, the changes could reflect differences in participants who were exposed to the program compared with people who were not exposed to the program.

- **Collect data from the same participants over time using a panel or longitudinal design**. These individuals serve as their own controls; characteristics of an individual observed earlier can be controlled for when analyzing changes in the outcomes.
Resources:

- Evaluating the Health Impact of Urban WASH Programmes: An Affordable Approach for Enhancing Effectiveness

This paper discusses how to measure impact, instead of outputs, for specific WASH interventions. The authors go on to suggest study designs for demonstrating health impact.

- Evaluability assessment for impact evaluation

This guidance focuses on the utility of, and guidance for, evaluability assessment before undertaking an impact evaluation. The guidance provides an overview of evaluability assessment and how it can be used for impact evaluation, also includes checklists and decision support for evaluability. Finally, it provides guidance on what to do after the assessment is concluded, and offer lessons learned from evaluability assessments in practice.

- A Guide to Longitudinal Program Impact Evaluation

This guide fills a technical gap for organizations conducting impact evaluations with longitudinal data. The guide first explains the advantages of gathering longitudinal data and then describes methods of analysis for use with longitudinal data, including assumptions required by each method. It demonstrates that the applications of these methods to longitudinal data can yield the statistically correct estimates of program impact required to answer the key evaluation questions such as those that have listed for the MLE project. The methods discussion is supplemented with examples from the literature and with empirical examples demonstrated with Stata.

- How Do We Know if a Program Made a Difference? A Guide to Statistical Methods for Program Impact Evaluation
How Do We Know if a Program Made a Difference? A Guide to Statistical Methods for Program Impact Evaluation provides an overview of core statistical and econometric methods for program impact evaluation (and, more generally, causal modelling). More detailed and advanced than typical brief reviews of the subject, it also strives to be more approachable to a wider range of readers than the advanced theoretical literature on program impact evaluation estimators. It thus forms a bridge between more basic treatments of the essentials of impact evaluation methods and the more advanced discussions. It seeks to discuss impact evaluation estimators in a thorough manner that does justice to their complexity, but in a fashion that is approachable.

Information on the corresponding webinar can be found here.

- Impact Evaluation Series

As a collaboration between UNICEF’s Office of Research, RMIT University, Better Evaluation, and International Initiative for Impact Evaluation (3ie), a series of methodological briefs and videos on the topic of impact evaluation were produced. Following the building blocks 1-10 from the bottom upward, these resources provide an overview of impact evaluation, strategies for causal attribution, and data collection and analysis methods for impact evaluation. Overview briefs and videos 1, 6, and 10 are available in English, French and Spanish.

- Assessing the Strength of Evidence

This document presents steps for assessing the strength of evidence. The document provides an introduction to the appraisal of the quality of individual studies and the assessment of the strength of bodies of evidence.

- Impact Evaluation Guidance Note and Webinar Series

This is a four-part series of guidance notes and webinars on impact evaluation. The purpose of the series is to build the capacity of NGOs (and others) to demonstrate effectiveness by increasing their understanding of and ability to conduct high quality impact evaluation.

- It’s All About MeE: Using Structured Experiential
Learning (¿e¿) to Crawl the Design Space - Working Paper 322

Here we extend the basic idea of rigorous impact evaluation?the use of a valid counterfactual to make judgments about causality?to emphasize that the techniques of impact evaluation can be directly useful to implementing organizations (as opposed to impact evaluation being seen by implementing organizations as only an external threat to their funding). We introduce structured experiential learning (which we add to M&E to get MeE) which allows implementing agencies to actively and rigorously search across alternative project designs using the monitoring data that provides real-time performance information with direct feedback into the decision loops of project design and implementation.

Our argument is that within-project variations in design can serve as their own counterfactual and this dramatically reduces the incremental cost of evaluation and increases the direct usefulness of evaluation to implementing agencies.

Broadening The Range of Designs And Methods For Impact Evaluations

This report brings together the findings and conclusions of a study on Impact Evaluation (IE) commissioned by DFID. It comprises an executive summary and 7 chapters:

- Introducing the study
- Defining impact evaluation
- Choosing designs and methods
- Evaluation questions and evaluation designs
- Programme attributes and designs
- Quality assurance
- Conclusions and next steps

Each of the main chapters has a main message box at the beginning that highlights the key points in that chapter. The final chapter draws together 10 study conclusions and briefly outlines some proposed follow ups to the study.

Introduction to Mixed Methods in Impact Evaluation

Mixed methods (MM) evaluations seek to integrate social science disciplines with predominantly quantitative (QUANT) and predominantly qualitative (QUAL) approaches to theory, data collection, data analysis and interpretation. The purpose is to strengthen the reliability of data, validity of the findings and recommendations, and to broaden and deepen our understanding of the processes through which program outcomes and impacts are
achieved, and how these are affected by the context within which the program is implemented. While mixed methods are now widely used in program evaluation, and evaluation RFPs frequently require their use, many evaluators do not utilize the full potential of the MM approach.

- **Resources in Database**

  This database provides access to systematic reviews that examine evidence on the effects of social and economic development interventions in low- and middle-income countries. The easy to use select and search fields generate summaries of the findings and methodologies of existing systematic reviews and protocols of ongoing studies.

- **Considerations for Incorporating Health Equity into Project Designs**

  Complementary guide and checklist for successfully including health equity in program design. Specifically helps identify gaps in details needed for health programming and communicating about the health approach. Includes discussion of building equity issues into M&E System.

- **Are You on the Right Track? Six Steps to Measure the Effects of Your Programme Activities**

  This workbook provides hands-on instructions for developing an outcome monitoring and evaluating plan that enables an organization to measure the achievements of activities related to sexual and reproductive health and rights as well as HIV prevention.

- **The 2010 User-Friendly Handbook for Project Evaluation**

  Report making recommendations on improving impact evaluation production and use. Focuses on clustering, coordination, knowledge management, capacity strengthening and communication and uptake.

- **Study design for the Measurement, Learning and**
Evaluation project. Policy brief.

This policy brief outlines the project's hybrid study design and its intended impact. The project's hybrid design integrates cross-sectional and longitudinal data to assess the direct impact of innovative family planning programs and identify any change in the contraceptive prevalence rate and behavioral and attitudinal norms in intervention cities over the course of the Urban Reproductive Health Initiative (Urban RH Initiative). These design elements allow the MLE project to measure programmatic impact across cities, over time, and among the urban poor and non-poor.

• Best Practices and Lessons Learned from Sanitation Programming at USAID: An Annotated Bibliography

This annotated bibliography is a compilation of selected documents produced by USAID water, sanitation, and hygiene programs from 1980s to present. It covers a wide range of relevant topics from sanitation policy and reform to sanitation and capacity building. This document has a special focus on best practices, lessons learned, and evaluation reports from USAID's global experiences in water, sanitation, and hygiene. [excerpt]

• Nonexperimental Quantitative Research

This chapter of Research Essentials: An Introduction to Designs and Practices provides an overview of nonexperimental research and its many purposes. This book chapter serves as a good reference material for understanding the terminology, factors, methods, and designs of nonexperimental research.

• Simply the Best? Understanding the Market for ?Good Practice? Advice From Government Research and Evaluations

This paper reports on the importance of methodological rigor when designing and implementing an evaluation. The paper reviews the many potential threats to the validity and adequacy of evaluation designs and provides checklists to easily assess the validity of quantitative, qualitative, and mixed-methods evaluation designs.
Quasi-Experimental Design

A quasi-experimental design is an experimental design without randomization. This website presents a selection of quasi-experimental designs and their associated analyses. The non-equivalent groups design and regression discontinuity design are presented in detail while more brief presentations of other interesting or important quasi-experimental designs are discussed, too.

The Most Significant Change (MSC) Technique: A Guide to Its Use

This publication is aimed at organisations, community groups, students and academics who wish to use MSC to help monitor and evaluate their social change programs and projects, or to learn more about how it can be used. The technique is applicable in many different sectors, including agriculture, education and health, and especially in development programs. It is also applicable to many different cultural contexts. MSC has been used in a wide variety of countries by a range of organisations. By 2004, MSC had been used both by NGOs and governments in Africa, Asia, Latin America, Europe and Australasia.

Click here to see the journal article, *A Diagonal, Story-Based Evaluation Tool: The Most Significant Change Technique*.

Experimental Research and Design

This website reviews the basics of experimental research and design. Steps for conducting experimental research, experimental designs, and factors influencing the validity and reliability of experimental designs are described.

Evaluating Family Planning Programs with Adaptations for Reproductive Health

This manual is intended to promote the use of program evaluation and evaluation results to inform program management, strategic planning, the design of new projects or initiatives, and resource allocation. The manual is designed to assist health professionals, such as program administrators and managers, in developing a better understanding of what program
evaluation is and why it is important, and how to design and implement an evaluation plan.

- **Case Study Evaluations**

  This report provides a review of methodological issues that may present when using case study evaluations. Six applications of case study methods are described, including the purposes and pitfalls of each, and the similarities and differences among them.

- **Introduction to Basic Data Analysis and Interpretation for Health Programs: A Training Tool Kit**

  A key component of monitoring and evaluation is the ability to analyze and interpret the data collected so that it is useful and meaningful relative to the program being evaluated. This training toolkit includes materials to improve understanding of statistical and monitoring and evaluation concepts in data analysis; build skills in basic data analysis; and enhance skills in data interpretation.

**Sampling Methods**

Conducting a full count, or a census, of the entire population that your health program is interested in is usually not feasible due to time and resource constraints. Therefore, you will need to select a sample, or a subset of the population in question, and try to estimate characteristics of the entire population based on results from the sample. Sampling methods may be **random** or **non-random**.

Sampling applies to both large quantitative studies and smaller qualitative studies.

How you choose the sample influences the quality of the final study results. Three factors in particular need to be considered:

- **Availability of a sampling frame**?the sampling frame is a description of the set of all possible individuals who could be part of your sample, for example, all households in a village or a district.
- **Determination of sample size**?the sample size should be determined based on a number of factors, such as budget, time, desired level of confidence that an estimate of the sample is within a given margin of the true value for the population, and the maximum allowable error. Sample size greatly influences the validity of study findings, so a statistician should calculate the required sample sizes for various levels of confidence.
Sampling method?two main methods for selecting a sample are random sampling and non-random sampling.

Sampling Method 1 - Random Sampling

Random sampling gives every individual in a specific population an equal chance of being selected. This eliminates selection bias—the risk of selecting a sample that is truly not representative of the entire population. Population surveys often use two-stage random sample designs, though they are not always possible or practical, and thus are used more often in large-scale program evaluations.

Sampling Method 2 - Non-Random Sampling

Non-random sampling involves a more focused and deliberate sampling technique. Non-random samples do not allow you to generalize the study results to the entire population. You must report results in terms of the respondents, for example, ?Among those interviewed, X% were satisfied with the quality of services received.? Types of non-random samples:

- **Quota.** A fixed and pre-determined number of subjects that possess particular characteristics are selected, for example, a certain number of men and women.
- **Snowball.** Often used for research on hard-to-reach sub-populations. For example, if you are interviewing female sex workers, during interviews, you would ask your interviewee if she knows other sex workers she could suggest that you interview; you would continue until you attain a pre-determined quota or you do not obtain any new suggestions.
- **Convenience.** Selections are made based on convenience to the evaluator, for example, study subjects are close in location or are ready participants in the study. Convenience sampling is an option when it is unnecessary to have a representative sample of the population of interest or when budget constraints prevent it.

Resources:

- **GIS Sampling**

This manual details how geographic information systems (GIS) can inform the sampling process, opening the door to powerful new possibilities for obtaining samples representative of particular subpopulations of interest, and what the procedure for applying GIS to the sampling process entails.

- **Monitoring Treatment Coverage of Neglected Disease**
Control Programs

Regular monitoring of drug treatment coverage is essential to monitor progress towards program goals and to identify communities with poor or insufficient coverage. This toolkit presents a simple, easy-to-use and accurate population-based survey method to assess drug treatment coverage.

Core Questions on Drinking-Water and Sanitation for Household Surveys

Safe water and adequate sanitation are basic to the health of every person on the planet, yet many people throughout the world do not have access to these fundamental needs. An important step towards resolving this global crisis is to understand its magnitude: how many people lack access to drinking-water and sanitation? To help answer this question, household surveys and censuses are conducted every year throughout the world to assess drinking-water, sanitation, and hygiene-related practices at the household level. Because of variations in survey tools, attempts to compare the results of one survey with those of another have been fraught with difficulties. Solving survey comparability problems is crucial if we are to establish accurate trends over time within a country, and compare data between countries. For this reason, the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation developed a set of harmonized survey questions that helps to resolve the comparability problems of the past. Including the harmonized questions in national surveys and censuses will help countries gain more systematic information on the drinking-water and sanitation needs of their population. Used widely, these harmonized questions will make data across international and national survey programmes more comparable, which in turn will result in more accurate country, regional and global estimates of unmet drinking-water and sanitation needs. The core harmonized questions presented in this guide have been adopted by the Demographic and Health Surveys, the Multiple Indicator Cluster Survey, and the World Health Survey. The purpose of this guide is to encourage more widespread use of these harmonized questions.

Measuring Mortality, Nutritional Status, and Food Security in Crisis Situations: SMART Methodology

The basic indicators for assessing the severity of a crisis are mortality rate and the nutritional status of a population. The SMART Methodology provides a basic, integrated method for assessing nutritional status and mortality rate in emergency situations. This manual is designed to provide agencies with the basic tools to collect the data necessary for planning
Sampling Manual for Facility Surveys: For Population, Maternal Health, Child Health and STD Programs in Developing Countries

Health facility assessments or surveys allow for monitoring program performance and the use of resources, and evaluating the impact of programs. The facility data that are needed for program monitoring or evaluation must relate directly to the program catchment area, which has implications for sampling. This manual presents sampling methodology that can generate estimates of health facilities and their characteristics. Two sampling designs are described: sampling for stand-alone health facility surveys and sampling for linked health facility surveys.

Guide to Monitoring and Evaluating Adolescent Reproductive Health Programs: Part 2

This guide is designed for program managers who monitor and evaluate adolescent reproductive health programs. Part II of the guide offers guidance on adapting instruments for monitoring and evaluation of the program, provides sample data collection instruments, and gives tips for collecting data through a variety of methods.

Using Statistical Sampling

This resource provides a review on sampling and methods to assist with research and evaluation. Sample design, selection and estimation procedures, and the concepts of confidence and sampling precision are described. The strengths and limitations of statistical sampling are summarized as well.

Sharing and Using Data
Data from research, monitoring and evaluation of health programs are valuable only if the appropriate stakeholders use the data to inform their decision-making—whether to design a new program, make mid-course corrections during program implementation, or develop a policy. Likewise, decision-makers must specify what kind of information they need and take steps to seek that information out. These two related concepts are commonly referred to as data demand and use (DDU).

Stakeholders at different levels of the health system represent a broad range of technical disciplines and occupations, each requiring different communication methods, formats and languages to reach them. Data from M&E of health programs need to be translated and packaged in appropriate formats relevant to decision-making.

Knowledge management (KM) approaches share common goals with data demand and use interventions. KM in public health is a systematic and deliberate approach to ensure that healthcare professionals have access to the latest research and information and that they apply that information to help their healthcare programs succeed. The KM process includes identifying the knowledge needs of a particular audience, such as frontline workers in a given village or national-level policymakers, and then generating, synthesizing and sharing relevant knowledge, such as M&E data, to help these audiences succeed in their work.

Both DDU and KM strategies recognize that much of the data and information needed for healthcare decision-making are already available. However, sometimes that information is scattered in a very decentralized service delivery structure, and thus the information does not get to the right people when they need it. Other times, the information is intangible or tacit—that is, the information is in people’s heads—and needs to be transformed into a format that can be stored and shared with others, referred to as explicit knowledge.

Read more about DDU and KM and explore related resources by clicking on the subpages on the right hand navigation.

Data Demand and Use

The resources included on this page provide guidance for developing interventions that are well positioned to be used by stakeholders to inform decision-making. The resources provided span a variety of health areas, from general health to TB, and can be used by health care professionals in a variety of sectors including policy makers, program managers, and health care providers. In addition to the general resources below, MEASURE Evaluation has developed guidance on data demand and use including training curricula, tools and other strategies to assist health care professionals in developing interventions that improve data demand and use.

Resources:
• **Data + Design**

Whether you're writing an article for your newspaper, showing the results of a campaign, introducing your academic research, illustrating your team's performance metrics, or shedding light on civic issues, you need to know how to present your data so that other people can understand it. Regardless of what tools you use to collect data and build visualizations, as an author you need to make decisions around your subjects and datasets in order to tell a good story. And for that, you need to understand key topics in collecting, cleaning, and visualizing data.

• **Understanding the Essential Nutrition Actions (ENA) Framework**

This brief outlines the ENA framework and provides materials and other training materials on nutrition frameworks.

• **Road Map for Implementing and Monitoring Policy and Advocacy Interventions**

This suite of tools is designed to strengthen the capacity of key stakeholders to engage in and monitor health policy development and advocacy interventions. The Road Map consists of eight different tools that can be used separately or together to help stakeholders systematically review the policy process and take steps toward full implementation, and are available in English, Spanish and French. Specific tools for monitoring include: Policy Monitoring Logic Model, Action Plan for Implementing and Monitoring Policy and Advocacy Interventions, and Action Plan for Monitoring Policy Interventions.

• **An Advocate's Guide: Strategic Indicators for Universal Access to Sexual and Reproductive Health and Rights**

This guide enables advocates to use data when advocating for universal access to sexual and reproductive health rights (SRHR) at the national, regional and global levels. The guide's inclusion of both quantitative and qualitative indicators is intended for advocates to better understand the process of generating concrete evidence on universal access to SRHR.
Data Demand and Use Coaching Guide

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, financing, access to medical products, or strategic planning (WHO, 2007). However when health professionals return to their place of work, they face many challenges implementing their new skills 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 goal of individual coaching for health professionals implementing a data demand and use (DDU) intervention is to continue to grow their problem-solving skills to achieve their objectives. The DDU coach can provide a team of health service providers the individual technical guidance to strategically adapt their DDU skills to their specific work environment and health goals. This on-going capacity building is as important as getting the job done.

- Improving Data Use in Decision Making: An Intervention to Strengthen Health Systems

The six attributes, or building blocks, of health system strengthening — as defined by the WHO — include a health workforce; health services; health financing; governance and leadership; medical products, vaccines, and technologies; and health information. This paper presents a conceptual framework that outlines the unique role of health information in strengthening the other five building blocks of health systems; defines specific interventions to strengthen the use of data in decision making; gives examples of intervention implementation; and provides a logic model for developing, monitoring, and evaluating interventions to improve the use of and demand for data in decision making.

- Evaluation: Learning from Experience: USAID Evaluation Policy

USAID has evaluation policy in place for the purposes of being accountable to stakeholders and to learn from experiences to improve effectiveness. This document describes in detail USAID’s evaluation policy, including roles and responsibilities, evaluation practices, and evaluation requirements.

- K4Health Guide for Conducting Health Information Needs
Assessments

K4Health developed this guide to walk others through the process of assessing information needs of individuals working at different levels of the health system; to share lessons learned and tips for various methodologies; and to provide tools that can be used or adapted in future assessments. This guide is intended to be a useful reference material for all health professionals, including policy makers, program managers, and health care providers.

- Good Practice Guidelines to Follow up to Evaluations

Good practice guidelines that contribute to better evaluation use by improving accountability and organizational learning. Specifically, the report provides guidance on management response to evaluation, tracking recommendation implementation and mechanisms that facilitate learning and knowledge development.

- Communicating Research for Evidence-Based Policymaking: A Practical Guide for Researchers in Socio-Economic Sciences and Humanities

Implementing evidence-based policy-making is partly dependent on disseminating and communicating reliable evidence. This guide is intended to assist researchers in executing effective communication strategies to their target audience--policy-makers.

- TB Cap Toolbox

This toolbox focuses on the Tuberculosis Control Assistance Program (TB CAP) laboratory tools.

- Data Demand and Information Use in the Health Sector: Strategies and Tools

The Data Demand and Information Use (DDIU) in the Health Sector series includes three resources intended to facilitate data use by: stimulating data demand, building capacity for using data, and enhancing evidence-based decision-making. Strategies and Tools is the
second part of this three-part series. This resource provides detailed strategies and tools for taking next steps in implementing data demand and use activities. The steps for designing and implementing a DDIU approach are outlined; constraints to evidence-based decision-making and strategies for addressing constraints are reviewed; and a set of tools for facilitating DDIU are provided, including: the Decision Calendar, Assessment of Constraints to Data Use, Information Use Mapping, Stakeholder Engagement, and PRISM Tools.

• **Data Demand and Use Tool Kit**

Here you will find links to core tools in fostering data demand and use:

- Quick Guide: Tools for Data Demand and Use in the Health Sector
- Framework for Linking Data with Action
- Assessment of Data Use Constraints
- Information Use Map
- The Stakeholder Engagement Tool
- Performance of Routine Information System Management (PRISM) Framework

• **Information Use Mapping: An Assessment Tool for Identifying Opportunities for Feedback Mechanisms and Data Use**

The Information Use Mapping Tool uses a flowchart framework to identify existing data collection, management, and reporting pathways. By using the flowchart process, the Tool is able to map out and present the data pathways in a clear and visible format.

• **Data Demand and Use Concepts and Tools: A Training Tool Kit**

This toolkit is intended to build skill and capacity within programs to conduct basic data analysis for monitoring and evaluation. The toolkit includes a facilitator guide; six modules on using data for informed decision-making, understanding data, and interpreting data; and a series of small group activities used to illustrate the modules with examples.

• **High Impact Research Training Tool Kit**
This toolkit is designed to help trainers conduct trainings that assist public health researchers in designing actionable research and improving their use of data to communicate research findings. The toolkit includes a facilitator guide; a series of sessions on disseminating and communicating research findings to inform decision-making; a job aid to facilitate the use of research results; and a set of group activities designed to further illustrate the sessions.

- **Integrating Data Demand and Use into a Monitoring and Evaluation Training Course Training Tool Kit**

This training toolkit is intended to assist trainers of monitoring and evaluation (M&E) workshops with integrating data demand and use concepts and tools into their training workshops. The toolkit provides training slides, skill-building activities, and facilitator guidance. The following components are include:

- A Facilitator Guide
- Several modules on generating, using, and communicating data
- Small group activity handouts for each data module
- Case study examples on data use in Ghana, Nigeria, and Rwanda.

- **Stakeholder Engagement: An Assessment and Implementation Tool for Identifying Stakeholders in a Data Collection Initiative and Engaging Them as Contributors and Beneficiaries**

Engaging stakeholders early and systematically in the research process enables the right questions to be asked in the right way, and thereby to define data activities that generate quality information. This tool provides a structured way to identify and engage stakeholders to improve data initiatives.

**Knowledge Management**

The resources included on this page provide guidance for and examples of knowledge management activities for health programs. The resources cover a variety of health areas from general health to water and sanitation and aim to be relevant to health care professionals in a variety of sectors including policy makers, program managers, and health care providers. The resources can be used in multiple stages of program implementation from program development and indicator selection to strategies for sharing knowledge. In addition to the general resources
below, K4Health created the Knowledge Management Toolkit that answers some basic questions, such as, ?What is KM?? and ?Why is it important?,? and provides practical resources for KM solutions from the field of international public health and development or are applicable to the field and can be adapted.

Resources:

- **Guide to Monitoring and Evaluating Knowledge Management in Global Health Programs**

  The objectives of this guide are: 1) To define and describe knowledge and KM activities in the context of global health and development programs, 2) To present a logic model that depicts the key components of KM activities and how these components interact to achieve outcomes, 3) To provide a concise list of indicators to measure key aspects of KM activities, 4) To provide instruments to measure the contribution of KM activities to outputs and outcomes and examples of their use.

- **Knowledge Management for Data Use and Decision Making in International Public Health**

  This resource provides an overview of knowledge management, describing how it can be used to transfer knowledge to help identify solutions to public health problems. More specifically, this resource provides an overview of knowledge management strategies that facilitate sharing knowledge, building skills and using data for decision-making. Sections on learning theories, audiences, and platforms for supporting knowledge management are included.

- **Knowledge Management and Human Resources for Health: Using Quality Information to Make Better Decisions**

  This brief provides an overview of the Capacity Project's Human Resources for Health (HRH) Global Resource Center that was designed and developed to help HRH practitioners quickly identify resources to meet their needs from a comprehensive collection of free and low-cost resources. The brief includes a description of the HRH Action Framework and provides illustrative country examples of how knowledge management can be used to strengthen HRH initiatives. Lastly, a set of recommendations are provided on HRH and knowledge
management based on the Capacity Project's experiences.

- **Knowledge Management**

In this 2-page brief, the MEASURE Evaluation project highlights its approach of using knowledge management to deliver information in a way that will assist the institutions and development partners working with the project to improve their monitoring and evaluation systems. Furthermore, the brief describes how the project applies knowledge management practices to facilitate knowledge exchange and the availability of data among project partners.

- **Global Learning Strategy**

The Global Learning Strategy is intended to serve as a structured process of generating, sharing, capturing, and disseminating knowledge about what works in scaling up and sustaining sanitation programs. Within this resource is a discussion on learning goals and principles; learning culture, tools and platforms; the learning process; and the organizational aspects of learning.

- **Guide to Monitoring and Evaluating Health Information Products and Services**

This is a document that outlines indicators and how to monitor and evaluate knowledge management.

**Learn More**

Resources included in the Learn More section include M&E guides, eLearning courses, other websites and toolkits as well as training resources that don’t fit nicely into the other sections of the toolkit. These resources complement the other tools and guidance provided in the MLE Toolkit by linking to examples of well-developed M&E guides, other related toolkits, and training courses that offer a more structured overview of M&E. These resources build on the information in the MLE toolkit and can facilitate a deepened understanding of M&E. To learn more about monitoring and evaluation of health programs, explore related resources by clicking on the subpages in the right hand navigation.
Explore additional resources by clicking on the subpages on the right hand navigation.

Resources:

- **Integrating Mobiles into Development Projects Handbook**

  This guide is intended for anyone interested in integrating mobiles into development projects more effectively. This practical and actionable guide helps consider the challenges that can impede the realization of a more sustainable and equitable future powered by mobile technology and other digital solutions, and to think critically about when and how to deploy mobile solutions. Chapter 5 is written with a focus on enabling you to effectively monitor and evaluate the implementation of M4D activities. It includes an introduction to commonly used indicators for determining the impact of mobile-based activities, tips for critically assessing project output, and suggestions on how to evaluate the impact that mobiles are having on a project.

**M&E Guides**

The following M&E Guides can assist managers of health programs to monitor and evaluate programs in a number of health areas.

Resources:

- **Introduction to Program Evaluation for Public Health Programs: A Self-Study Guide**

  This document is a ?how to? guide for planning and implementing evaluation activities. The manual is based on CDC?s Framework for Program Evaluation in Public Health, and is intended to assist state, local and community managers and staff of public health programs in planning, designing, implementing and using the results of comprehensive evaluations in a practical way. The strategy presented in this manual will help assure that evaluations meet the diverse needs of internal and external stakeholders.
Managing Evaluations: A How-To Guide for Managers and Commissioners of Evaluation

This guide provides simple and practical advice for the management and commissioning of evaluations in a public sector context. It is a useful document for individuals whose primary responsibility is to oversee and coordinate evaluation. The guide provides an overview of the key concepts & process and covers the major stages involved in managing evaluation:

Stage 1 - Planning the Evaluation
Stage 2 - Commissioning the Evaluation
Stage 3 - Undertaking the Evaluation
Stage 4 - Reporting and Follow-up

How Do We Know if a Program Made a Difference? A Guide to Statistical Methods for Program Impact Evaluation

How Do We Know if a Program Made a Difference? A Guide to Statistical Methods for Program Impact Evaluation provides an overview of core statistical and econometric methods for program impact evaluation (and, more generally, causal modelling). More detailed and advanced than typical brief reviews of the subject, it also strives to be more approachable to a wider range of readers than the advanced theoretical literature on program impact evaluation estimators. It thus forms a bridge between more basic treatments of the essentials of impact evaluation methods and the more advanced discussions. It seeks to discuss impact evaluation estimators in a thorough manner that does justice to their complexity, but in a fashion that is approachable.

Information on the corresponding webinar can be found here.

Mapping Community-Based Global Health Programs: A Reference Guide for Community-Based Practitioners

This document serves as a guidance framework for those aiming to use maps to support community-based programs. Included in the guide are key questions to ask when planning a
mapping effort, review necessary resources, and outline the four main stages of the mapping process: 1) Community engagement, 2) Data collection, 3) Visualization, and 4) Analysis and Information use. Further mapping and geospatial data collection tools and software resources are provided in the annexes.

- **Integrating Mobiles into Development Projects Handbook**

  This guide is intended for anyone interested in integrating mobiles into development projects more effectively. This practical and actionable guide helps consider the challenges that can impede the realization of a more sustainable and equitable future powered by mobile technology and other digital solutions, and to think critically about when and how to deploy mobile solutions. Chapter 5 is written with a focus on enabling you to effectively monitor and evaluate the implementation of M4D activities. It includes an introduction to commonly used indicators for determining the impact of mobile-based activities, tips for critically assessing project output, and suggestions on how to evaluate the impact that mobiles are having on a project.

- **Operational Guidelines for Monitoring and Evaluation of HIV Programmes for Sex Workers, Men who have Sex with Men, and Transgender People: Volumes I & II**

  These Guidelines address the unique monitoring and evaluation needs of settings where HIV affects men who have sex with men, sex workers, and transgender people. They apply to countries with low-level, concentrated, and generalized HIV epidemics. The Guidelines assume three levels of monitoring and evaluation that require coordination - at national, sub-national and service delivery levels.

- **MAMA Global Monitoring and Evaluation Framework**

  The Mobile Alliance for Maternal Action (MAMA) partnership seeks to create a replicable model for reaching low-income mothers through text messaging health information on their babies' development. By using this monitoring and evaluation framework to evaluate programming, MAMA performance can be measured regularly and evidence can be built for associating mHealth messages and greater access to health information with improved caregiving and care-seeking behaviour among women.

- **Evaluation: Learning from Experience: USAID Evaluation**
Policy

USAID has evaluation policy in place for the purposes of being accountable to stakeholders and to learn from experiences to improve effectiveness. This document describes in detail USAID’s evaluation policy, including roles and responsibilities, evaluation practices, and evaluation requirements.

• Lymphatic Filariasis: Monitoring and Epidemiological Assessment of Mass Drug Administration

A manual designed to ensure that national elimination programs have the best available information on methodologies and procedures for monitoring mass drug administration (MDA), assessing the impact of MDA and implementing adequate surveillance after MDA has ceased. Includes sampling and surveillance strategies and recommendations.

• UNEG Quality Checklist for Evaluation Reports


• Monitoring Drug Coverage for Preventive Chemotherapy

The manual explains how to monitor drug coverage for a NTD control program. The manual describes the drug coverage measurement, data collection, data compilation and data analysis.

• Guide to Actionable Measurement

The Gates Foundation uses results measurement (i.e., indicator monitoring, evaluation, and impact tracking) to inform their decision-making. This document developed by the Gates Foundation is intended to provide an understanding of results measurement and assist with determining how to best allocate staff time and resources to use data effectively. Within the guide you will find:
An overview of why the Gates Foundation measures
A framework for thinking about Actionable Measurement
Guidelines for how to apply Actionable Measurement to your work
Examples of how the framework may be used by programs

- **Toolkit for monitoring and Evaluating Gender-Based Violence Interventions Along the Relief to Development Continuum**

  The purpose of the toolkit is to provide users with tools for the M&E of Gender Based Violence (GBV)-specific programs. While the intended audience for the toolkit is USAID staff engaged in GBV programming, it may also be useful for other M&E practitioners engaged in M&E of GBV interventions. The toolkit has four main sections: Guiding Principles, Planning for M&E, Implementing the M&E Plan and Using M&E Findings.

- **Integrating Gender in HIV/AIDS Programmes in the Health Sector: Tool to Improve Responsiveness to Women’s Needs**

  The purpose of this operational tool is to:
  
  - raise awareness of how gender inequalities affect women’s access to and experience of HIV/AIDS programmes and services;
  - offer practical actions on how to address or integrate gender into specific types of HIV/AIDS programmes and services.

- **A Manual for Integrating Gender Into Reproductive Health and HIV Programs: From Commitment to Action**
This Manual promotes greater understanding of how gender relations and identities affect the capacity of individuals and groups to make informed choices about their sexual and reproductive health, and to negotiate and obtain better reproductive health outcomes. Users of the manual will learn how to harness an increased awareness of gender considerations for the design, implementation, and evaluation of more effective programs.

- **A Guide to Monitoring and Evaluation for Collaborative TB/HIV Activities**

  This Guide has been developed to assist in facilitating the collection of standardized data and help in the interpretation and dissemination of these data for program improvement. Furthermore, in an effort to ensure consistency, the Guide includes a core set of internationally accepted and standardized indicators for monitoring and evaluating program performance.

  This resource can also be found in the USAID TB Care I Toolbox.

- **A Guide for Monitoring and Evaluating Population, Health and Environment (PHE) Programs**

  Training module designed to increase understanding of the basic concepts and practical approaches for performance monitoring and evaluation for integrated PHE programs. Teaches tools and techniques used to monitor these programs.

  *NOTE: Requires login and completion of fundamental course: http://www.cpc.unc.edu/measure/resources/training/materials/basic-me-concepts-portuguese/ME%20Fundamentals%20-%20MENTOR.pdf/view*

- **Trachoma Control: A Guide for Programme Managers**

  This guide has been written for managers of national and district trachoma control programs. It sets out, step-by-step, what is needed to assess the magnitude and extent of the trachoma problem in the area and how to plan, implement, monitor and evaluate a program to control, and ultimately eliminate, trachoma.
TB Program Evaluation Handbook: Introduction to Program Evaluation

This beginner-level Handbook provides an introduction to program evaluation specifically tailored for TB programs in the United States. The Handbook is organized by six key steps:

- Engage Stakeholders
- Describe the Program
- Focus the Evaluation Design
- Gather Credible Evidence
- Justify Conclusions
- Ensure Use and Share Lessons Learned

Challenges in Program Evaluation of Health Interventions in Developing Countries

Rigorous evaluation of health programs and interventions is necessary to understand their efficacy and to inform decision-making. This report is intended to promote understanding of why evaluation is essential to any health intervention and review ways to increase the capacity to evaluate health programs and interventions. This report provides an overview of various approaches, methodologies, and issues related to program evaluation for health interventions in developing countries.

A Guide for Monitoring and Evaluating Child Health Programs

This guide provides a comprehensive listing of commonly used indicators for monitoring and evaluating child health programs in developing countries. The guide provides a succinct but thorough overview of monitoring and evaluation, describing program components (inputs, processes, outputs, and outcomes), evaluation approaches, indicators, and data sources. Commonly used indicators and a description for each are listed for various child health topics, such as newborn health, immunization, and mortality.

Monitoring and Evaluation Toolkit

This information package aims to provide those working at the country level on M&E systems
linked to expanded HIV/AIDS, TB and/or malaria programmes with rapid access to key resources and standard guidelines. Users include national disease programme managers and project leaders, donor agencies, technical and implementing agencies and NGOs to better harmonise information demands.

A Guide to Monitoring and Evaluation of Capacity-Building Interventions in the Health Sector in Developing Countries

Tool to assess the strength of the Monitoring and Evaluation (M&E) plan related to a Program, project or group of projects. Contains five sections:

1. National strategy and M&E Plan
2. Goals and objectives of the program/project
3. M&E indicators in the program/project
4. Data dissemination and transparency; and
5. M&E Budget


This Handbook is designed to assist researchers in understanding research methodology, data collection and analysis, and dissemination and use of research findings. Specifically, chapter by chapter, the Handbook describes the process of identifying a research question(s), determining objectives and variables, selecting an appropriate study design to test one’s hypothesis and research question, issues related to sampling, data collection and analysis, and communicating and sharing research findings.

Summary of the Framework for Program Evaluation

Effective program evaluation is a systematic way to improve and account for actions by involving procedures that are useful, feasible, ethical, and accurate. The framework is a practical, nonprescriptive tool, designed to summarize and organize essential elements of program evaluation. The framework comprises steps in program evaluation and standards for effective program evaluation.
Adhering to these steps and standards will allow an understanding of each program's context and will improve how program evaluations are conceived and conducted. The specific purposes of the framework are to:

- Summarize and organize the essential elements of program evaluation
- Provide a common frame of reference for conducting effective program evaluations
- Clarify steps in program evaluation
- Review standards for effective program evaluation; and
- Address misconceptions about the purposes and methods of program evaluation

Preparing an Evaluation Scope of Work

This document offers suggestions for preparing a good evaluation scope of work. It explains the relevance of an evaluation scope of work to ensure management needs are being met, and provides a breakdown of the content that should be included in an evaluation scope for work.

Evaluating Programs for HIV/AIDS Prevention and Care in Developing Countries: A Handbook for Program Managers and Decision Makers

This Handbook is intended to assist program managers with evaluating HIV prevention and care programs in an effort to promote high quality and effective services. The first section of the Handbook reviews the conceptual approach and framework for monitoring and evaluation of HIV programs and the development of an evaluation plan. Section II of the Handbook describes various HIV program intervention strategies and their evaluation. Section III reviews methodologies and Section IV reviews assessing program impact.

Other Websites/Toolkits
The following websites and toolkits provide a number of supplemental resources to assist managers of health programs in monitoring and evaluating programs.

Resources:

- **M&E Learning Center**
  
  This resource provides an enhanced online learning experience for researchers, program managers, trainers, policy makers, students and other public health professionals.

- **End Violence Against Women and Girls - Programming Essentials, Monitoring & Evaluation**
  
  This website provides essential information and guidance for programming to address violence against women and girls. A full module on monitoring and evaluation for programs that address violence against women and girls is included and covers a spectrum of topics from M&E frameworks and plans to conducting impact evaluations. Each section provides illustrative examples and extra guidance and tips.

- **WaSH MEL (Measurement Evaluation Learning)**
  
  The WaSH MEL project is dedicated to creating, sharing, and implementing cutting-edge monitoring, evaluation, and learning (MEL) tools for water, sanitation, and hygiene (WaSH) practitioners. Provides a virtual learning center and other tools resources for monitoring, evaluating, and improving sustainable access to WaSH around the globe.

- **Survey Tools for OVC Programs**
The Survey Tools for OVC Programs Toolkit provides tools and resources that simplify and standardize the data needed to set measurable goals for an OVC intervention. Using them, program designers and administrators can now answer questions fundamental to the planning and evaluation of OVC programs worldwide. Resources available include: a manual describing in detail all tools, questionnaires, impact indicators, data analysis guide, data management guide, and an M&E supplement.

**TB Care 1 - M&E Toolbox**

This toolbox includes a list of tools on M&E of TB Control. Some of these resources include:
- Definitions and reporting framework for TB (English, French, and Spanish)
- Compendium of indicators for M&E National TB Programs
- Manual on use of routine data quality assessment (RDQA) tool for TB monitoring
- A guide to monitoring and evaluation for collaborative TB/HIV activities

**Africa Impact Evaluation Initiative Website**

The website for an impact evaluation initiative. Provides some detailed information about impact evaluation on the impact evaluation tab.

**Inventory of M&E Resources**

The purpose of the Global Evaluation and Monitoring Network for Health (GEMNet-Health) network is to foster organizational growth, collaboration, and South-to-South support for monitoring and evaluation of health programs globally through ongoing and future institutional linkages among members, beginning with a core of MEASURE Evaluation's current and former training partners. GEMNet-Health compiles a document that contains information related to the following: M&E training programs offered; Short-term M&E training programs; Diploma programs, master’s level courses or tracks, and PhD programs; Training partners currently offering online courses; M&E-related technical skills; Other technical and specialized skills; M&E research experience; Technical assistance on M&E topics; Resources related to M&E teaching and training programs; Infrastructure resources which facilitate the conduct of M&E teaching and training programs.

**Gender and Evaluation Website**

Virtual community about gender, research and evaluation.
Tool Kit on Gender Equality Results and Indicators

This toolkit is intended to ensure that gender perspectives are incorporated into development initiatives, and to monitor and evaluate gender equality results. The tool kit provides a menu of gender equality outcomes, results, and indicators that may be selected or adapted by users. Although the tool kit focuses primarily on the sectors and strategic priorities of the Asian Development Bank (ADB) and Australia's aid program, it is designed for a wider audience of development policy makers, planners, implementers, and evaluators. The tool kit will assist specialists in particular sectors to identify gender equality results and indicators; it may also be used by gender specialists who work across a range of sectors.

- **CORE Group: Monitoring and Evaluation Website**

  The M&E Working Group develops tools and trainings to increase child survival and health program performance and quality through the standardization of use of data, analysis and reporting.

- **National Evaluation Capacity Development: Practical tips on how to strengthen National Evaluation Systems**

  The document offers a roadmap aimed at providing the UN system with practical guidance on how to strengthen national evaluation capacity systems. The focus is on what national evaluation systems could look like in terms of country structure, roles, responsibilities, etc. With that as a frame of reference, a menu of options of possible roles for UN agencies is provided as well as a list of DO?s and DON?Ts.

- **A Toolkit for Monitoring and Evaluating Household Water Treatment and Safe Storage Programmes**

  This tool addresses the gap in the need for consistent and harmonized M&E of household water treatment and safe storage interventions. This document addresses the gap by recommending indicators and providing examples of conducting M&E on household water treatment and safe storage programs.
A Toolkit on Collecting Gender and Assets Data in Qualitative and Quantitative Program Evaluations

Understanding the role of men’s and women’s asset ownership and control is key to achieving global development goals. A crucial first step toward understanding the gender dimensions of asset ownership and control is acquiring detailed gender-disaggregated information on assets through monitoring, evaluation, and data collection. Developed as part of the Gender, Agriculture, and Assets Project (GAAP), this toolkit is intended to assist researchers and practitioners who are new or unfamiliar to using mixed methods in gender and assets data collection and analysis. This toolkit defines key concepts, highlights methods for collection, analysis and dissemination, and provides further resources.

- **E3 Trade Facilitation Monitoring, Evaluation and Learning Toolkit**

  USAID Forward, the Agency’s wide-ranging effort to modernize foreign assistance, spotlights the importance of high-quality monitoring and evaluation, along with active-learning strategies at all levels. This toolkit brings together the guidance, templates, examples, and checklists you need in order to work efficiently and excel at monitoring, evaluation and adaptive learning in USAID trade-facilitation programs and projects.

- **Community-Level Program Information Reporting for HIV/AIDS Programs**

  Community-Level Program Information Reporting for HIV/AIDS Programs (CLPIR) is intended to improve the quality of information and the information systems used for community-level HIV/AIDS programs by supporting monitoring and reporting systems that capture program indicator data. CLPIR contains process guidelines and tools that include illustrative program indicators, as well as generic data collection forms.

- **Programme Manager's Planning Monitoring & Evaluation Toolkit: Defining Evaluation**

  UNFPA’S Programme Manager's Planning Monitoring & Evaluation Toolkit provides guidance to improve planning, monitoring and evaluation (PM&E) activities in the context of results
based program management. This part of the Toolkit, Tool number 2, defines the concept of evaluation, what it is and why we evaluate, the role of evaluation in relation to monitoring and audit, and its role in the context of results-based management approaches.

- **Compendium of Child Survival Monitoring and Evaluation Tools**

  This compendium of tools includes a variety of population- and facility-based assessment tools that can be used at different levels of the health system. There are a total of 24 child survival monitoring and evaluation tools available for downloading.

- **Stop TB Partnership: Resources**

  The Stop TB Partnership was founded in 2001 with the mission to serve every person who is vulnerable to TB and ensure that high-quality treatment is available to all who need it. This web site provides a variety of resources, including reports and evaluations focused on tuberculosis.

- **UNAIDS**

  UNAIDS, the Joint United Nations Programme on HIV/AIDS, is an innovative partnership that leads and inspires the world in achieving universal access to HIV prevention, treatment, care and support.

- **Publications**

  This web page provides several types of publications including: M&E newsletters, malaria planning and development reports, and M&E reports.

- **The Health Manager's Toolkit**

  The Health Manager's Toolkit is an electronic compendium of tools intended to assist health professionals in the provision of accessible, high quality, and sustainable health services. The Monitoring and Evaluation section of the Toolkit provides tools and instruments to help
managers design and conduct monitoring and evaluation activities, including performance management, policy assessment, program review and evaluation, and monitoring and evaluation of training programs. The Toolkit also has a number of tools to help with the selection of indicators that can be used to gauge the progress and success of programs, systems, and interventions.

- **Monitoring and Evaluation of President's Malaria Initiative**

  This web page describes the monitoring & evaluation of the President's Malaria Initiative.

- **Research and Monitoring and Evaluation**

  Although research is not a HIP priority, the project will engage in limited operations research where the gaps are greatest. In addition, formative research may be necessary at a country level to develop appropriate behavior change strategies.

- **WHO / UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation**

  This website is a resource for decision makers, researchers, and civil society at large to learn about the JMP's activities, the status of water supply and sanitation coverage and its importance for our health and well-being, and to obtain detailed statistics about the use of water and sanitation facilities at different scales (global, regional and country-level).

- **African Programme for Onchocerciasis Control (APOC)**

  This web page provides monitoring and evaluation information for the African Programme for Onchocerciasis Control.

- **Monitoring and Evaluation Systems**
This web page provides information and resources on: capacity building, data demand and use, data quality, health facility assessments, performance of routine information system management, and sample vital registration with verbal autopsy.

- **MEASURE Evaluation**

  MEASURE Evaluation is the USAID Global Health Bureau’s primary vehicle for supporting improvements in monitoring and evaluation in population, health and nutrition worldwide. The MEASURE Evaluation team helps to identify data needs, collect and analyze technically sound data, and use that data for health decision making. The web site provides information about the MEASURE Evaluation program and a variety of resources and tools intended to improve decision-making in the health sector.

- **Roll Back Malaria Toolbox**

  This Toolbox is organized into seven Main Categories of the programming cycle for malaria control; these are further divided into Key Areas where the tools are most appropriately aligned.

- **World Health Organization**

  WHO is the directing and coordinating authority for health within the United Nations system. It is responsible for providing leadership on global health matters, shaping the health research agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries and monitoring and assessing health trends.

**eLearning Courses and other Training Materials**

The following resources provide an overview of key M&E concepts in public health, providing an opportunity for health care professionals to learn about M&E at their own pace.

**Resources:**
Data Visualization - An Introduction

In this course, participants will learn to identify their audience; find a story in a set of data appropriate for a target audience; understand the process of developing simple but compelling data visualizations; share and disseminate the visualization; and promote ongoing use of the data to inform decision-making.

Monitoring and Evaluation Facilitator's Guide

The purpose of the Monitoring and Evaluation Facilitator's Guide is to provide facilitators with guidance and tips on leading a monitoring and evaluation (M&E) knowledge and skills transfer course. The guide was designed to lead to an interactive, skill-building training and to improve the knowledge and proficiency of both new and experienced staff. The guide is part of a package that consists of the facilitator's guide, PowerPoint slides, exercises/group work, and reference materials. All lesson materials are available for download by module and session. Modules include an overview of M&E, statistical concepts, and analysis, including qualitative and quantitative analysis.

The Asian Development Bank-3ie Video Lecture Series

This video Lecture Series is a primer on impact evaluation for those wanting to learn the basics. If you are a programme implementer, a policymaker or a student looking to learn about how evaluation can generate rigorous evidence on the impact of development interventions, then this lecture series is for you. No prior knowledge is required. The impact evaluation and systematic review experts in these series use plain language and graphics to explain technical concepts. By drawing from several case studies, they illustrate how rigorous methods are used to assess the impact of development programmes in multiple sectors.

The lectures in the series focus not just on the generation of evidence but also the use of research findings to inform policies and programmes. The first six video lectures cover the core concepts in impact evaluations and systematic reviews. Lectures 7-15 explore how impact evaluation methods can be applied to development programmes in particular sectors including: infrastructure, health, humanitarian relief assistance, governance, climate change, agriculture, education, social protection and microfinance.

Gender M&E eLearning Course

This course has been developed for program managers working on gender-focused programs, gender advisors, and individuals working in gender affairs, ministries of gender, or
other government departments focusing on gender who seek to strengthen their understanding of M&E. It is also applicable to M&E officers who seek to integrate a gender perspective into their M&E efforts.

At the end of the course, learners will be able to:

- Obtain information necessary for planning the intervention response and set targets at the service delivery level
- Explain how to implement a system to monitor program activities at the service delivery level
- Describe how to evaluate whether prevention programs at the service delivery level are effective in reducing rates of HIV transmission among key populations
- Use the Checklist to self-assess available data and resources mentioned in the guidelines
- Know where to look for further information or technical assistance

GIS Techniques for M&E of HIV/AIDS and Related Programs

This course presents a practical guide for using a geographic information system (GIS) to integrate, visualize, and analyze geographically-referenced data extracted from the Demographic and Health Surveys (DHS) and other key data sets to facilitate monitoring and evaluation (M&E) of HIV/AIDS and related health programs. To make the course accessible to learners without commercial GIS software licenses, the course focuses on the use of free and open source software (FOSS). The course includes a number of practical exercises which will allow you to apply what you have learned, using the FOSS - QGIS. These exercises are estimated to add an additional three hours to completing the course.

Upon completion of the course, learners will be able to:

- Define a GIS and articulate the value of using a GIS to integrate, visualize, and analyze program data.
- Differentiate the primary uses of several free and open source GIS software options.
- Explain the fundamentals of geographic data, including the shapefile format.
- List the principal geo-referenced sources for HIV/AIDS data and explain how their geographic structure can be leveraged for M&E of HIV/AIDS and related programs.

- Recognize the types of M&E questions that can be answered using the highlighted data sets and GIS software packages.

- Use the free and open source GIS software package, QGIS, to perform essential GIS tasks needed to respond to typical M&E questions.

• **A Practical Guide to Conducting a Barrier Analysis**

The Practical Guide to Conducting a Barrier Analysis is a training curriculum with the objective of building skills to plan and carry out a Barrier Analysis survey. The guide addresses topics such as sampling, interviewing techniques, coding, tabulation and data use. After completing the course, trainees will be able to effectively plan and implement a Barrier Analysis survey and use the results to inform their behavior change strategy. This guide is also available in Spanish and French.

To learn more about how to implement BA, see these example questionnaires.

• **M&E Guidelines for Sex Workers, Men who Have Sex with Men, & Transgender Populations- National Level**

This course can be taken by individuals and groups of stakeholders interested in and working to improve programs for sex workers, men who have sex with men, and transgender populations. There is an urgent need to scale up monitoring and evaluation (M&E) of HIV prevention programs serving sex workers, men who have sex with men, and transgender populations. Currently, there is limited information on the implementation of services for the prevention and treatment of HIV infection among these populations. A good monitoring and evaluation system can measure the availability of services, guide the implementation of services, and assess their effectiveness.

At the end of the course, learners will be able to:

- Describe the "8 Step Public Health Questions Model"

- Obtain information necessary for planning the intervention response and set targets at national and sub-national levels

- Explain how to implement a system to monitor program activities at the national and sub-
national levels

- Describe how to evaluate whether prevention programs at national and sub-national levels are effective in reducing rates of HIV transmission among key populations
- Use the Checklist to self-assess available data and resources mentioned in the guidelines
- Know where to look for further information or technical assistance

**M&E Guidelines for Sex Workers, Men who Have Sex with Men, & Transgender Populations-Service Delivery Level**

This course can be taken by individuals and groups of stakeholders interested in and working to improve programs for sex workers, men who have sex with men, and transgender populations. This course was adapted from the Operational Guidelines for Monitoring and Evaluation of HIV Programmes for Sex Workers, Men who have Sex with Men, and Transgender People (Vol II). It will help learners to apply the guidelines to the service delivery setting in order to strengthen HIV service delivery for sex workers, men who have sex with men, and transgender people.

At the end of the course, learners will be able to:

- Obtain information necessary for planning the intervention response and set targets at the service delivery level
- Explain how to implement a system to monitor program activities at the service delivery level
- Describe how to evaluate whether prevention programs at the service delivery level are effective in reducing rates of HIV transmission among key populations
- Use the Checklist to self-assess available data and resources mentioned in the guidelines
- Know where to look for further information or technical assistance

**30 Sets of M&E Training Materials**

MEASURE Evaluation has made 30 sets of M&E training materials available in various languages for trainers to use and adapt. The training materials have been designed by MEASURE Evaluation experts and collaborators for workshops. This list of M&E training materials covers topics from LQAS to DDU to basic M&E.
Evaluation for Evaluation Specialists Training Materials

This training series includes 20 modules on various aspects of program evaluation, ranging from developing evaluation questions, an introduction to evaluation design, to using quantitative and qualitative and mixed methods for evaluation. Intended for USAID Evaluation Specialists, these modules can be used to strengthen the evaluation knowledge and skills to design and manage high-quality and useful evaluations of any evaluation program staff working in the design, management, and implementation of evaluations.

- Knowledge Management (KM) in Global Health Programs

This course provides a basic understanding of what Knowledge Management (KM) is and why it is important to the field of global health. Learners will become familiar with KM practices and techniques to overcome the challenge of getting essential, evidence-based knowledge into programs and practice and facilitating exchange of expertise and experience among health practitioners, programmers and policy makers to improve service quality, program effectiveness, and health outcomes.

- An Introduction to Monitoring and Evaluation of Human Resources for Health

This course provides a basic introduction to monitoring and evaluation concepts and how they apply to the field of human resources for health (HRH) to inform evidence-based planning and decision-making.

*Note: This course requires registration.*

- Fundamentals of Implementation Research

This module, Fundamentals of Implementation Research, is an introduction to the language, concepts, tools, and strategies used in implementation research (IR). The information is intended to be practical and useful for researchers and program implementers as an orientation to IR.

- Evaluating a Public Health Program
"Evaluating a Public Health Program? is the last in a series of trainings dealing with the development and evaluation of public health programs. This training serves as a comprehensive tutorial on the Evaluation of a Public Health Program. The process of Program Evaluation continues the use of pertussis reduction in Lakeshore County as an example program and utilizes the logic model developed in the "Introduction to Logic Models" training. The primary focus of the course is to explore the six steps and the four standard groups in the Center for Disease Control's Framework for Program Evaluation. This framework represents all of the activities prescribed by the CDC in Program Evaluation, along with sensible guidance under the standards to aid in good decision-making.

• **Introduction to Logic Models**

"Introduction to Logic Models? is the second in a series of trainings dealing with the development and evaluation of public health programs. This training serves as an introduction to logic models with information about why logic models are important, an explanation of the model components and real-world examples of how logic models are built.

• **Program Development & Evaluation**

"Program Development & Evaluation? is the first in a series of trainings dealing with the development and evaluation of public health programs. This training will walk you through the basic steps of program development, including identifying the problem, planning, implementing and evaluating the program. The latter part of the training explores both formative and summative evaluation, and why these components are so critical to the process.

• **Analyzing Data and Communicating Results**

Data analysis is a useful component of outcome measurement because it helps you quantify your support and provides a much more compelling message when communicating your investment to stakeholders. Although analyzing data can help you make informed decisions, it is worth noting that data does not substitute for judgment or managerial decision-making.

• **Measuring Outcomes**

Every organization hopes to deliver quality services. Outcome measurement will help you
understand whether yours does. With the information you collect, you can determine which activities to continue and build upon and which you may need to change in order to improve the effectiveness of your program. The Measuring Outcomes guidebook will be helpful to any organization interested in learning more about implementing or improving its procedures for measuring outcomes.

• Standards for a Competency-based Approach to Monitoring and Evaluation Curricula & Trainings

Document providing standards for capacity building in monitoring and evaluation (M&E) through human resource training. It addresses essential competencies for those in M&E leadership positions, covering both technical and managerial competencies and standards for the development and implementation of M&E curricula/trainings aiming to improve M&E competencies.

• Strengthening Nonprofits - M&E eLearning Courses

Creating and Implementing a Data Collection Plan eLearning Course
This lesson will illustrate effective options and techniques for data collection. Data collection is a crucial step in the process of measuring program outcomes. By measuring outcomes, an organization can better recognize the effectiveness and value of its programs, and pinpoint where changes or improvements need to be made. Before collecting data, your organization should have a solid understanding of the purpose of the program you wish to evaluate. You should have a working logic model that identifies your desired outcomes, the resources and activities necessary to accomplish these outcomes, and a detailed list of the specific measures you will take to implement them. Once this piece is complete, you can begin gathering relevant data through surveys, interviews, focus groups, or other methods. At the end of this lesson, you will be able to understand how to plan for and implement data collection for a specific program; identify the most appropriate and useful data collection methods for your purposes; and manage and ensure the integrity of the data you collect.

Developing a Plan for Outcome Measurement eLearning Course
An outcome is a measurable and observable change in individuals, groups, organizations, systems, or communities. Outcome measurement is a systematic way to assess the extent to which a program has achieved its intended results. The main questions addressed in outcome measurement are: What has changed in the lives of individuals, families, organizations, or the community as a result of this program? Has this program made a difference? How are the lives of program participants better as a result of the program? By the end of this lesson, you will be able to: understand how to identify measurable outcomes and outcome chains, develop a logic model, and identify performance indicators and performance targets to support the outcome measurement process.
Analyzing Data and Communicating Results eLearning Course

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Population, Health and Environment M&E Training Tool Kit

This training tool kit aims to increase the M&E capacity, skills and knowledge of those who plan, implement, and evaluate innovative, integrated health and community development programs in low-resource settings. The tool kit provides managers, technical specialists, and M&E staff with user-friendly, modifiable training components to adapt for a specific developing-country and programmatic context. This is a trainer-training resource.

M&E Fundamentals: A Self-Guided Minicourse

Overview of a tool used to assess M&E Plans and Systems. Specifically assesses data collection, reporting and management systems to measure indicators of Program and project success. Intended to be used at national level, within groups of projects and within individual projects that are seeking to assess M&E data collection and reporting systems and to implement action plans for strengthening M&E.

eLearning Courses
This eLearning Course Center will help one further understand a variety of topics discussed in this toolkit. Some of the courses offered in the course catalogue are entitled:-Data Quality
Data Use for Program Managers-Demographic and Health Surveys: Data Use-M&E Frameworks for HIV/AIDS Programs-M&E FundamentalsCompleting the course is estimated to take approximately two hours.

- Introduction to the KPC Survey: Trainer's Guide

The CORE Group's Knowledge, Practice, Coverage (KPC) Survey Training Curriculum provides trainer guidelines and participant handouts and resources to train field workers to carry out a KPC survey. Training guide.

- From Evidence to Practice

"From Evidence to Practice" is a self-paced, web-based course, that teaches the evidence-based public health decision-making process by plunging learners into a realistic situation. In the course, learners are asked to understand and employ the evidence-based framework to research and develop an intervention strategy that addresses disparities in birth outcomes in a local community. Learners make a series of choices about finding data to accurately describe the problem, evaluate interventions based on evidence and applicability to the community, and defend their choices. The course outcome ? securing funding for interventions chosen ? depends on sound evidence-based decision-making.

- A Trainer's Guide to the Fundamentals of M&E for Population, Health and Nutrition Programs

Guide designed to assist health planner and evaluators to understand the concepts of capacity building and design capacity-building M&E plan.

- Methods for Program Impact Evaluation

This webinar is focused on the introduction of the recent publication *How Do We Know if a Program Made a Difference? A Guide to Statistical Methods for Program Impact Evaluation* manual. Video and slides are available.
MEASURE Evaluation makes free online courses on monitoring and evaluation (M&E) topics available for researchers, program managers, trainers, policy makers, students, and other public health professionals. These courses have been developed by global experts in order to provide state-of-the-art information on M&E topics.

- **Geographic Approaches to Global Health**

  It is important to harness geography to manage, analyze, and leverage spatial data effectively when planning, monitoring, and evaluating health sector programs. Through this course, learners will gain an understanding of how to use spatial data to enhance the decision-making process for health program implementation in limited resource settings.

**Resources by Health Topic**

The resources included in this toolkit are organized primarily by M&E topic indicated in the pages listed in the right hand navigational menu, such as Frameworks, Indicators and Study Designs for Evaluation. However, you can also view the resources by health topics, which cover:

- Gender
- GIS/Mapping
- **HIV/AIDS and Tuberculosis** - This category includes resources related to HIV/AIDS (and other STIs), tuberculosis (TB) and integrated HIV/AIDS and TB programs.
- Malaria
- Maternal and Child Health
- mHealth
- Neglected Tropical Diseases
- Nutrition
- Reproductive Health/Family Planning, including postabortion care and population, health and environment (PHE) programs
- Water and Sanitation

**Gender**

Resources:
End Violence Against Women and Girls - Programming Essentials, Monitoring & Evaluation

This website provides essential information and guidance for programming to address violence against women and girls. A full module on monitoring and evaluation for programs that address violence against women and girls is included and covers a spectrum of topics from M&E frameworks and plans to conducting impact evaluations. Each section provides illustrative examples and extra guidance and tips.

Gender M&E eLearning Course

This course has been developed for program managers working on gender-focused programs, gender advisors, and individuals working in gender affairs, ministries of gender, or other government departments focusing on gender who seek to strengthen their understanding of M&E. It is also applicable to M&E officers who seek to integrate a gender perspective into their M&E efforts.

At the end of the course, learners will be able to:

- Obtain information necessary for planning the intervention response and set targets at the service delivery level
- Explain how to implement a system to monitor program activities at the service delivery level
- Describe how to evaluate whether prevention programs at the service delivery level are effective in reducing rates of HIV transmission among key populations
- Use the Checklist to self-assess available data and resources mentioned in the guidelines
- Know where to look for further information or technical assistance

Integrating Gender into Scale-up Mapping Tool

The tool provides program managers with a methodology to systematically integrate gender into scale-up initiatives. This tool focuses on addressing gender in the implementation and scale up of a best practice rather than integrating gender into the best practice itself.
Gender and Evaluation Website

Virtual community about gender, research and evaluation.

Tool Kit on Gender Equality Results and Indicators

This toolkit is intended to ensure that gender perspectives are incorporated into development initiatives, and to monitor and evaluate gender equality results. The tool kit provides a menu of gender equality outcomes, results, and indicators that may be selected or adapted by users. Although the tool kit focuses primarily on the sectors and strategic priorities of the Asian Development Bank (ADB) and Australia's aid program, it is designed for a wider audience of development policy makers, planners, implementers, and evaluators. The tool kit will assist specialists in particular sectors to identify gender equality results and indicators; it may also be used by gender specialists who work across a range of sectors.

A Practical Guide for Conducting and Managing Gender Assessments in the Health Sector

This guide is a user-friendly Gender Analysis tool. It provides answers to questions such as:

- What does it mean to conduct a gender assessment?
- How do you comply with USAID's strategic focus on gender in program design and implementation?
- How do you turn the findings from a gender analysis into practical recommendations?

The objective of this guide is to enable its users to design, collect, use, or manage information on the linkages between gender inequality and health.

A Toolkit on Collecting Gender and Assets Data in Qualitative and Quantitative Program Evaluations

Understanding the role of men's and women's asset ownership and control is key to
achieving global development goals. A crucial first step toward understanding the gender dimensions of asset ownership and control is acquiring detailed gender-disaggregated information on assets through monitoring, evaluation, and data collection. Developed as part of the Gender, Agriculture, and Assets Project (GAAP), this toolkit is intended to assist researchers and practitioners who are new or unfamiliar to using mixed methods in gender and assets data collection and analysis. This toolkit defines key concepts, highlights methods for collection, analysis and dissemination, and provides further resources.

- **Integrating Human Rights and Gender Equality in Evaluation - Toward UNEG Guidance**

  Highlights the need for people centered evaluation and for evaluators to consider human rights and gender equity. This handbook addresses gaps in tools and frameworks that reflect these topics.

- **Toolkit for monitoring and Evaluating Gender-Based Violence Interventions Along the Relief to Development Continuum**

  The purpose of the toolkit is to provide users with tools for the M&E of Gender Based Violence (GBV)-specific programs. While the intended audience for the toolkit is USAID staff engaged in GBV programming, it may also be useful for other M&E practitioners engaged in M&E of GBV interventions. The toolkit has four main sections: Guiding Principles, Planning for M&E, Implementing the M&E Plan and Using M&E Findings.

- **Integrating Gender in HIV/AIDS Programmes in the Health Sector: Tool to Improve Responsiveness to Women’s Needs**

  The purpose of this operational tool is to:
  
  - raise awareness of how gender inequalities affect women’s access to and experience of HIV/AIDS programmes and services;
  - offer practical actions on how to address or integrate gender into specific types of HIV/AIDS programmes and services.
**A Manual for Integrating Gender Into Reproductive Health and HIV Programs: From Commitment to Action**

This Manual promotes greater understanding of how gender relations and identities affect the capacity of individuals and groups to make informed choices about their sexual and reproductive health, and to negotiate and obtain better reproductive health outcomes. Users of the manual will learn how to harness an increased awareness of gender considerations for the design, implementation, and evaluation of more effective programs.

**Researching Violence Against Women: A Practical Guide for Researchers And Activists**

Produced by PATH and the World Health Organization, this guide draws on the experience of researchers from more than 40 countries and presents methods for performing surveys and qualitative research on gender-based violence in low-resource settings. It covers all aspects of the research process, from study design to training field workers. It also describes ways to use findings to influence decision-makers. Most important, it presents clear guidelines for protecting the safety of women participating in the research.

*Note: Each chapter can be viewed or downloaded separately under the section "INDIVIDUAL CHAPTERS."

**Compendium of Gender Scales**

In March 2010, C-Change convened a working group of researchers with expert knowledge of gender scales to review those scales in current use. The participants identified scales that measure adherence to gender norms and reviewed how they have been used to measure the success of interventions in changing these norms. The working group enthusiastically supported the creation of an online compendium of gender scales. They saw the value of making it easily accessible by health and development practitioners, who may want to use these tools to assess gender-related attitudes and beliefs and evaluate their interventions. Scales selected for the compendium have been tested for their ability to measure gender attitudes and predict behaviors of interest, such as gender-based violence and partner reduction.
GIS/Mapping

Resources:

• E2G Mapping Tool Version 3

E2G 3.0 is a free mapping tool from MEASURE Evaluation that allows you to create color-shaded maps in Google Earth using Excel spreadsheet data for administrative divisions (e.g., provinces and districts) without the need for a geographic information system (GIS). E2G 3.0 is now available in both English and French for 50 countries, with a focus on PEPFAR countries, and contains a variety of enhancements. The tool will enable decision makers, program planners and analysts at all levels to display their Excel-based data for administrative divisions on a color-shaded map. This can help overcome many of the barriers that have limited the use of mapping for decision support and M&E.

• Mapping Community-Based Global Health Programs: A Reference Guide for Community-Based Practitioners

This document serves as a guidance framework for those aiming to use maps to support community-based programs. Included in the guide are key questions to ask when planning a mapping effort, review necessary resources, and outline the four main stages of the mapping process: 1) Community engagement, 2) Data collection, 3) Visualization, and 4) Analysis and Information use. Further mapping and geospatial data collection tools and software resources are provided in the annexes.

• GIS Sampling

This manual details how geographic information systems (GIS) can inform the sampling process, opening the door to powerful new possibilities for obtaining samples representative of particular subpopulations of interest, and what the procedure for applying GIS to the sampling process entails.

• GIS Techniques for M&E of HIV/AIDS and Related Programs
This course presents a practical guide for using a geographic information system (GIS) to integrate, visualize, and analyze geographically-referenced data extracted from the Demographic and Health Surveys (DHS) and other key data sets to facilitate monitoring and evaluation (M&E) of HIV/AIDS and related health programs. To make the course accessible to learners without commercial GIS software licenses, the course focuses on the use of free and open source software (FOSS). The course includes a number of practical exercises which will allow you to apply what you have learned, using the FOSS - QGIS. These exercises are estimated to add an additional three hours to completing the course.

Upon completion of the course, learners will be able to:

- Define a GIS and articulate the value of using a GIS to integrate, visualize, and analyze program data.
- Differentiate the primary uses of several free and open source GIS software options.
- Explain the fundamentals of geographic data, including the shapefile format.
- List the principal geo-referenced sources for HIV/AIDS data and explain how their geographic structure can be leveraged for M&E of HIV/AIDS and related programs.
- Recognize the types of M&E questions that can be answered using the highlighted data sets and GIS software packages.
- Use the free and open source GIS software package, QGIS, to perform essential GIS tasks needed to respond to typical M&E questions.

**Geographic Tools for Global Public Health: An Assessment of Available Software**

There is a growing list of software options for those wishing to map data. Users in global public health often have little time or money to invest in developing the technical expertise and data required for mapping, and are therefore confronted with capacity and data constraints that can make mapping difficult to implement. This makes the process for selecting the most appropriate software especially challenging. In this guide, the MEASURE GIS Working Group evaluates the features and ease of use of five commonly used mapping applications: ArcGIS, Quantum GIS (QGIS), Epi Info, Google mapping tools (including Google Maps, Google Earth, and the related MEASURE E2G tool), and DevInfo.

**GIS for Monitoring Scale Up**
Generally, GIS and mapping have been used for program planning, resource allocation, and monitoring and evaluation (M&E) focusing on mapping unmet need for FP, and calculating and measuring program or facility reach and coverage. This section explores additional uses for GIS in FP and reproductive health, such as understanding accessibility and utilization of services, stock outs of commodities, and supply and demand for services and commodities.

**HIV/AIDS Rapid Assessment Guide**

This guide consists of five tools to assist in assessing HIV/AIDS within a program or project area to understand the contextual factors, such as the population and their health and social views, to be considered when conducting a needs assessment. The five tools are:

- A mapping guide
- A site inventory
- An ethnographic guide
- A focus group guide
- Rapid behavioral surveys

**Geographic Approaches to Global Health**

It is important to harness geography to manage, analyze, and leverage spatial data effectively when planning, monitoring, and evaluating health sector programs. Through this course, learners will gain an understanding of how to use spatial data to enhance the decision-making process for health program implementation in limited resource settings.

**Spatial Data Repository**

The Spatial Data Repository provides geographically-linked health and demographic data from the MEASURE Demographic and Health Surveys (DHS) project and the U.S. Census Bureau for mapping in a geographic information system (GIS). On the website: 1) boundaries of DHS regions can be explored to visualize change over time, 2) data from DHS indicators and U.S. Census Bureau population estimates and projections can be downloaded in GIS format, and 3) users without GIS software can make interactive maps of DHS indicators at STATcompiler.

**HIV/AIDS and Tuberculosis**

Resources:
• **Survey Tools for OVC Programs**

The Survey Tools for OVC Programs Toolkit provides tools and resources that simplify and standardize the data needed to set measurable goals for an OVC intervention. Using them, program designers and administrators can now answer questions fundamental to the planning and evaluation of OVC programs worldwide. Resources available include: a manual describing in detail all tools, questionnaires, impact indicators, data analysis guide, data management guide, and an M&E supplement.

• **Referral Systems Assessment and Monitoring Toolkit**

As a result of the recent impetus toward service integration in the health systems of developing countries, the Referral Systems Assessment and Monitoring (RSAM) Toolkit was developed to assist health and program managers obtain and use information regarding the performance of referral systems. This toolkit contains two main components: 1) The Referral System Assessment (RSA), which is used as an in-depth examination of the referral processes and mechanisms, and 2) Referral System Monitoring (RSM), which is used to generate routine data on the frequency and completion of referrals across services. These tools were originally designed to assess and monitor HIV/AIDS referral systems, but can be adapted for any type of referral system. The toolkit provides clear, step-by-step instructions to assist managers in deciding which component to implement; which tools to use; how to adapt the tools; how to use the tools for data collection; and how to analyze, interpret, and use the information generated.

• **A Guide to Developing a TB Program Evaluation Plan**

Good planning will assist the evaluation process and writing an evaluation plan is an essential part of the planning process. This Guide can be used to assist TB staff in developing an evaluation plan. A template is included along with detailed instructions for filling out each section of the plan.

• **Framework for Linking Data with Action**

The Framework for Linking Data with Action provides insight on how to align data resources with the decisions they would support, and vice versa. Through a combination of templates and process guidance, the tool serves three key purposes: to encourage both greater use of
information in decision making, encourage better use of existing information and monitor the use of information in decision making. The tool helps program managers appreciate the need for good supporting data, helps data managers visualize how their work can be applied, and helps all stakeholders prioritize decisions and data collection activities.

- **Priorities in Operational Research to Improve Tuberculosis Care and Control**

  The objective of this publication is to help programme managers, consultants and researchers who intend to conduct TB-related operational research to identify the appropriate methods to be used according to the questions that are being addressed, and prepare for grant applications to donors (including the Global Fund) for operational research support.

- **Manual on Use of Routine Data Quality Assessment (RDQA) Tool for TB Monitoring**

  The Routine Data Quality Assessment (RDQA) tool is designed to assist TB program managers in assessing the quality of their data and data management system, and to monitor and improve their data management system in order to yield better quality data. Data and data systems are assessed according to five attributes: 1) accuracy-reliability, 2) completeness, 3) timeliness, 4) availability, and 5) integrity.

  This resource can also be found in the USAID TB Care I Toolbox.

- **Guidance on Ethics of Tuberculosis Prevention, Care and Control**

  This document addresses a broad range of ethical issues arising in TB programs, ranging from informed consent and isolation to health care workers' rights and obligations, and clinical and epidemiological studies.

- **TB Cap Toolbox**

  This toolbox focuses on the Tuberculosis Control Assistance Program (TB CAP) laboratory tools.
Guidelines on Construction of Core Indicators

This resource is intended to assist countries in reporting on their national HIV/AIDS response. A set of 25 core indicators are defined to facilitate standardized reporting, comparative analysis, and aggregate analysis of regional and global HIV/AIDS responses. The core indicators recommended are categorized as follows:

1. National Commitment and Action
2. National Knowledge and Behavior
3. National-Level Program Impact

Community-Level Program Information Reporting for HIV/AIDS Programs

Community-Level Program Information Reporting for HIV/AIDS Programs (CLPIR) is intended to improve the quality of information and the information systems used for community-level HIV/AIDS programs by supporting monitoring and reporting systems that capture program indicator data. CLPIR contains process guidelines and tools that include illustrative program indicators, as well as generic data collection forms.

Basic Terminology and Frameworks for Monitoring and Evaluation

This book provides a basic introduction to the fundamentals of M&E, including most commonly used terms in M&E. While not intended to be a comprehensive how-to guide, it provides a concise explanation of commonly used terms and frameworks in current M&E practice to encourage a common understanding between M&E professionals, policy-makers and program managers alike. Though it uses HIV as its focus, the M&E fundamentals described here, are also relevant to other areas of public health and development.

Guidance on Developing Terms of Reference for HIV Prevention Evaluation

The purpose of this guide is to facilitate planning HIV prevention-related evaluations, their design, and drafting terms of reference (TOR) or scope of work. The first section of the TOR guide includes basic definitions and concepts about evaluation, including the rationale for and
role of evaluations. Section two of the TOR guide describes how to prepare the TOR (i.e., scope of work) for a prevention evaluation. Illustrative examples are included in the appendices of the guide.

- **Multidrug-Resistant Tuberculosis (MDR-TB) Indicators**

  This resource highlights the minimum set of indicators for the programmatic management of multidrug-resistant tuberculosis (MDR-TB) in national tuberculosis control programmes.

- **Monitoring and Evaluation in Global HIV/AIDS Control? Weighing Incentives and Disincentives for Coordination among Global and Local Actors**

  This paper discusses coordination efforts of both donors and recipient countries in the monitoring and evaluation (M&E) of health outcomes in the field of HIV/AIDS. The coordination of M&E is a much underdeveloped area in HIV/AIDS programming in which, however, important first steps towards better synchronisation have already been taken. In this paper, we review the concepts and meanings commonly applied to M&E, and approaches and strategies for better coordination of M&E in the field of HIV/AIDS. Most importantly, drawing on this analysis, we examine why the present structure of global health governance in this area is not creating strong enough incentives for effective coordination among global and local actors.

- **A Guide to Monitoring and Evaluation for Collaborative TB/HIV Activities**

  This Guide has been developed to assist in facilitating the collection of standardized data and help in the interpretation and dissemination of these data for program improvement. Furthermore, in an effort to ensure consistency, the Guide includes a core set of internationally accepted and standardized indicators for monitoring and evaluating program performance.

  This resource can also be found in the USAID TB Care I Toolbox.

- **Strategies for More Effective Monitoring and Evaluation Systems in HIV Programmatic Scale-Up in Resource-
Limited Settings: Implications for Health Systems Strengthening

The authors of this article discuss common challenges to monitoring and evaluating systems used in the rapid scale-up of HIV services as well as innovations potentially relevant to systems used to monitor, evaluate, and inform health systems strengthening.


Operations Research (OR) is the applied science of maximizing the effective use of limited resources. This paper presents a review of the many logistical and operational problems that have limited the global scale-up of HIV care and antiretroviral treatment for people with AIDS. The authors identify and describe OR techniques that could be used to address the barriers to scaling up HIV care and treatment.

- A Framework for Monitoring and Evaluating HIV Prevention Programmes for Most-At-Risk Populations

This publication provides guidance in monitoring and evaluating HIV prevention programs for most-at-risk populations. It is designed primarily for program managers and others involved in planning and implementing monitoring and evaluation of programs and projects for most-at-risk populations at both national and subnational levels. The appendix of this document includes a list of indicators (and their method of measurement) relevant to most-at-risk populations.

- Community HIV Counseling and Testing: A Handbook on Participatory Needs Assessment

Community HIV Counseling and Testing (COHCT) needs assessment refers to the process through which community members interact with a development agency to assess their HIV counseling and testing needs, identify key problems, and develop an action plan to address those needs. This handbook provides basic conceptual explanations and guidelines on how to conduct a COHCT needs assessment as an entry process for community planning for HIV
The handbook is organized in five modules:

- **Module I** is an introductory module describing the concept of COHCT and its role in putting HIV counseling, testing, care, and support on the community agenda.
- **Module II** focuses on the participatory learning and action (PLA) methodology in the context of HIV/AIDS.
- **Module III** provides a menu of PLA tools that can be used to engage the community in analyzing its own HIV situation.
- **Module IV** focuses on data analysis and reporting, describing how PLA data is analyzed and offering tips on communicating findings in a report.
- **Module V** gives a step-by-step guide on how to facilitate community planning while using data generated from the COHCT needs assessment.

**Public-Private Mix for TB Care and Control: A Tool for National Situation Assessment**

This document focuses on the National Situation Assessment (NSA) Tool which aims to collect and collate information on all aspects of public-private mix (PPM) for tuberculosis (TB) care and control in a country, and to facilitate the use of this information to assist the systematic implementation of PPM.

**Patient Monitoring Guidelines for HIV Care and Antiretroviral Therapy**

These guidelines are intended to assist district-level and national-level HIV/AIDS program managers in developing and implementing patient monitoring systems. The guidelines include a list of essential minimum standard HIV care and ART patient monitoring data elements and describe how their collection will facilitate clinical care and measurement of agreed upon indicators. Examples of a generic patient monitoring system and specific country and project examples are included.

**TB Program Evaluation Handbook: Introduction to Program Evaluation**

This beginner-level Handbook provides an introduction to program evaluation specifically tailored for TB programs in the United States. The Handbook is organized by six key steps:

- Engage Stakeholders
- Describe the Program
- Focus the Evaluation Design
National AIDS Programmes: A Guide to Indicators for Monitoring and Evaluating National Antiretroviral Programmes

As antiretroviral therapy (ART) programs scale-up to meet demand, monitoring and evaluation will assist with monitoring progress and refining approaches. This document describes an approach to monitoring and evaluating the scaling up of ART, including the provision of a list of core indicators. Each core indicator is defined and includes the rationale for its use and what it measures; how to measure it and the tools used for measurement; the frequency of measurement; and the strengths and limitations of each indicator.


This module of the Training Guide is intended to increase participants’ capacity to develop and implement comprehensive monitoring and evaluation plans for HIV prevention and care programs. Using the Training Guide, Facilitators will provide an overview of monitoring and evaluation work plans, their key elements, and the seven steps to developing a plan. Additionally, a work plan template is included in the Guide.

This guide is intended for use by programme managers at the national level, particularly managers of national AIDS programmes. It may also be useful for programme managers and planners at subnational levels who seek to align their measurement efforts with national ones. This guide identifies a set of indicators, methods for measuring them, and their strengths and limitations. The purpose is to help national AIDS programme managers in planning and monitoring HIV prevention programmes for young people. The indicators are organized into four chapters in accordance with a logic model linking programmatic action to expected outcomes and, ultimately, to epidemiological impact.

• Compendium of Indicators for Monitoring and Evaluating National Tuberculosis Programs

To improve the quality and effectiveness of TB control programs, this compendium was developed to assist programs with monitoring and evaluating TB control activities. The compendium provides a comprehensive listing of the most widely used TB indicators relevant to developing countries and uses standardized terminology to facilitate consistent use of indicators across programs. In addition to providing a collection of TB control indicators, this resource provides an overview of monitoring and evaluation in general, an overview of monitoring and evaluation of TB control programs, and guidance on developing a monitoring and evaluation plan for TB programs.

This resource can also be found in the USAID TB Care I Toolbox.

• TB Control at a Glance

This brief on tuberculosis (TB) control addresses TB from a public health perspective, providing an overview of the disease worldwide. A brief review of the DOTS Strategy for controlling TB and how to adapt DOTS to local conditions is included. Summary tables in the brief describe the core elements of the DOTS Strategy and related interventions for TB control.

• Designing HIV/AIDS Intervention Studies: An Operating Research Handbook

This Handbook is designed to assist researchers in understanding research methodology, data collection and analysis, and dissemination and use of research findings. Specifically, chapter by chapter, the Handbook describes the process of identifying a research
question(s), determining objectives and variables, selecting an appropriate study design to test one's hypothesis and research question, issues related to sampling, data collection and analysis, and communicating and sharing research findings.


  This manual is intended to build an understanding of the what, why, and how of evaluation, guiding users in both designing and implementing evaluations of HIV/AIDS prevention projects. The manual is designed to provide an introduction to evaluation with sections on concepts and definitions, designing an evaluation, data collection methods, and data management and analysis. Additionally, a series of 12 HIV/AIDS related projects are presented and their associated evaluation described.

- **National AIDS Programmes: A Guide to Monitoring and Evaluation**

  This guide provides an overview of monitoring and evaluation of HIV/AIDS programs. The guide describes the use of indicators at different levels (international, national, district, and project level); the different functions of surveillance, monitoring, and evaluation; and the features of a good monitoring and evaluation system. Lastly, a series of key HIV/AIDS indicators for various areas are proposed and described.

- **UNAIDS**

  UNAIDS, the Joint United Nations Programme on HIV/AIDS, is an innovative partnership that leads and inspires the world in achieving universal access to HIV prevention, treatment, care and support.

- **Evaluating Programs for HIV/AIDS Prevention and Care in Developing Countries: A Handbook for Program Managers and Decision Makers**

  This Handbook is intended to assist program managers with evaluating HIV prevention and care programs in an effort to promote high quality and effective services. The first section of
the Handbook reviews the conceptual approach and framework for monitoring and evaluation of HIV programs and the development of an evaluation plan. Section II of the Handbook describes various HIV program intervention strategies and their evaluation. Section III reviews methodologies and Section IV reviews assessing program impact.

- **HIV/AIDS Survey Indicators Database**

  The HIV/AIDS Survey Indicators Database is a comprehensive source of information on HIV/AIDS indicators derived from sample surveys such as the Demographic Health Surveys and Reproductive Health Surveys. The Database is an easy to use resource that produces data tables for specific countries by criteria identified by the user (i.e., by select background characteristics). Country Reports can also be easily generated based on selected criteria.

- **Indicator Registry**

  The Indicator Registry is a central repository of information on indicators used to track the AIDS epidemic and the national, regional and global response. The Registry can be searched by a variety of categories, by indicator, or by keywords.

- **Sample Logic Model for VCT Program Implementation and Technical Assistance**

  This resource provides sample logic models for VCT Program Implementation and VCT Technical Assistance.

- **Stop TB Partnership: Resources**

  The Stop TB Partnership was founded in 2001 with the mission to serve every person who is vulnerable to TB and ensure that high-quality treatment is available to all who need it. This web site provides a variety of resources, including reports and evaluations focused on tuberculosis.

**Malaria**

**Resources:**
Malaria Social and Behavior Change Communication (BCC) Indicator Reference Guide

This second edition of the Malaria SBCC indicator guide aims to support partners involved in malaria prevention and control to evaluate the effectiveness of malaria BCC and to measure levels of behavior change for malaria prevention and case management at the country level. The indicators are also useful for monitoring and designing malaria BCC interventions.

Household Survey Indicators for Malaria Control

This resource provides guidance on monitoring and evaluation of the updated objectives and targets of the Global Malaria Action Plan. It is also includes guidance for constructing indicators from household surveys, including using insecticide-treated nets and indoor residual spraying, intermittent preventative treatment during pregnancy, case management among children under five, and impact indicators.

Zambia National Malaria Indicator Survey

This report presents the results of the Zambia National Malaria Indicator Survey 2008, a comprehensive, nationally representative household survey designed to measure progress toward achieving the goals and targets set forth in the National Malaria Strategic Plan 2006-2010.

Monitoring and Evaluation Indicators to be used within The President’s Malaria Initiative

This resource includes a table with the full set of indicators to be used for monitoring and evaluation of the President's Malaria Initiative.

Publications
This web page provides several types of publications including: M&E newsletters, malaria planning and development reports, and M&E reports.

- **Monitoring and Evaluation of President's Malaria Initiative**

  This web page describes the monitoring & evaluation of the President's Malaria Initiative.

- **Roll Back Malaria Toolbox**

  This Toolbox is organized into seven Main Categories of the programming cycle for malaria control; these are further divided into Key Areas where the tools are most appropriately aligned.

**Maternal and Child Health**

**Resources:**

- **MEASURE DHS Mobile App**

  MEASURE DHS mobile provides national-level DHS data for 25 key indicators across 90 countries, including fertility, family planning use, vaccination, childhood mortality, nutrition, HIV testing and prevalence, maternal health, ITN use, and some basic background data such as literacy, education, and access to electricity. The data can be viewed in a chart or a table to compare across countries or over time in countries that have had more than one DHS survey. These key indicators can also be viewed on a map.

- **Integrating Mobiles into Development Projects Handbook**

  This guide is intended for anyone interested in integrating mobiles into development projects more effectively. This practical and actionable guide helps consider the challenges that can impede the realization of a more sustainable and equitable future powered by mobile technology and other digital solutions, and to think critically about when and how to deploy mobile solutions. Chapter 5 is written with a focus on enabling you to effectively monitor and
evaluate the implementation of M4D activities. It includes an introduction to commonly used indicators for determining the impact of mobile-based activities, tips for critically assessing project output, and suggestions on how to evaluate the impact that mobiles are having on a project.

- **Barrier Analysis Questionnaires**

  TOPS has provided training in the Designing for Behavior Change framework, which recommends the use of Barrier Analysis (BA), a survey that identifies the most significant barriers to behavior change. TOPS created a set of 30 BA Questionnaires and guidance on how to adapt these questionnaires as references for organizations planning to implement BA. The questionnaires cover a range of behaviors including: maternal and child nutrition, health, water and sanitation, and agriculture. The questionnaires can be used exactly as they are, but can also be modified to match the context in which they will be used.

  To learn more about how to plan and implement BA for your project, see this [Practical Guide to Conducting a Barrier Analysis](#).

- **Survey Tools for OVC Programs**

  The Survey Tools for OVC Programs Toolkit provides tools and resources that simplify and standardize the data needed to set measurable goals for an OVC intervention. Using them, program designers and administrators can now answer questions fundamental to the planning and evaluation of OVC programs worldwide. Resources available include: a manual describing in detail all tools, questionnaires, impact indicators, data analysis guide, data management guide, and an M&E supplement.

- **Impact Evaluation Series**

  As a collaboration between UNICEF's Office of Research, RMIT University, Better Evaluation, and International Initiative for Impact Evaluation (3ie), a series of methodological briefs and videos on the topic of impact evaluation were produced. Following the building blocks 1-10 from the bottom upward, these resources provide an overview of impact evaluation, strategies for causal attribution, and data collection and analysis methods for impact evaluation. Overview briefs and videos 1, 6, and 10 are available in English, French, and Spanish.
A Practical Guide to Conducting a Barrier Analysis

The Practical Guide to Conducting a Barrier Analysis is a training curriculum with the objective of building skills to plan and carry out a Barrier Analysis survey. The guide addresses topics such as sampling, interviewing techniques, coding, tabulation and data use. After completing the course, trainees will be able to effectively plan and implement a Barrier Analysis survey and use the results to inform their behavior change strategy. This guide is also available in Spanish and French.

To learn more about how to implement BA, see these example questionnaires.

- MAMA Global Monitoring and Evaluation Framework

  The Mobile Alliance for Maternal Action (MAMA) partnership seeks to create a replicable model for reaching low-income mothers through text messaging health information on their babies' development. By using this monitoring and evaluation framework to evaluate programming, MAMA performance can be measured regularly and evidence can be built for associating mHealth messages and greater access to health information with improved caregiving and care-seeking behaviour among women.

- mBCC Field Guide: A Resource for Developing Mobile Behavior Change Communication Programs

  What is considered a standard mobile health (mHealth) program today might be defunct within a few short years. Tools are needed to guide the design of mobile applications for health and to elicit insights about what does and does not work without duplicating existing resources. This Field Guide is an attempt to take stock of what we know today about the power of mobile communication tools to influence health behaviors at both the consumer and health care provider levels. While this guide focuses on applying mobile strategies to health problems, the same principles can be used to address issues in other sectors, such as agriculture and the environment.

- Indicators for assessing infant and young child feeding practices Part 2: Measurement
This document is a companion to the document Indicators for assessing infant and young child feeding practices. Part 1: Definitions published by WHO and partners in 2008. It provides tools for the collection and calculation of the indicators. It is intended for use by managers of large-scale population-based surveys that will collect information on the status of feeding practices among infants and young children less than 2 years of age.

• **Monitoring Emergency Obstetric Care: A Handbook**

Emergency Obstetric Care (EmOC) is the timely access to care for women experiencing complications during pregnancy, birth, or postpartum. This handbook presents a series of indicators designed to monitor EmOC interventions intended to reduce maternal mortality. The handbook is designed for practical use within health care facilities. A set of eight EmOC-related indicators are listed and the type of data and data collection processes are described. Forms and worksheets to assist with data collection and calculation are also included.

• **Child Status Index : A Tool for Assessing the Well-Being of Orphans and Vulnerable Children- Manual**

In an effort to better assess the needs of orphans and vulnerable children (OVC) and their household and to understand whether programs are making an impact in addressing the needs of OVC, the Child Status Index (CSI) was developed. The CSI is an easy-to-use tool to assess the current needs of a child, monitor improvements in specific areas of child well-being, and identify areas of concern that can be served by program interventions. The index gathers information in the following areas:

- Food/nutrition
- Shelter and care
- Protection
- Health care
- Psychosocial
- Education

This manual describes the CSI in detail.

• **Indicators for assessing infant and young child feeding practices Part 1: Definitions**

This document presents new and updated indicators to assess infant and young child feeding
practices at household level. It is hoped that the indicators will be widely used in large-scale population-based surveys in countries to assess progress in the implementation of the Global Strategy for Infant and Young Child Feeding and to measure the coverage of effective nutrition interventions in young children.

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**Tools: Key Indicators**

The Key Indicators are a group of 17 recommended indicators that provide important information to monitor and assess maternal and child health interventions. The table of indicators is organized by intervention area (e.g., maternal and newborn care, immunization, control of diarrhea, etc.), with the recommended indicators defined and their calculation described.

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**A Guide for Monitoring and Evaluating Child Health Programs**

This guide provides a comprehensive listing of commonly used indicators for monitoring and evaluating child health programs in developing countries. The guide provides a succinct but thorough overview of monitoring and evaluation, describing program components (inputs, processes, outputs, and outcomes), evaluation approaches, indicators, and data sources. Commonly used indicators and a description for each are listed for various child health topics, such as newborn health, immunization, and mortality.

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**Measuring Maternal Mortality from a Census: Guidelines for Potential Users**

One of the challenges in addressing maternal mortality is measuring the rate of it accurately due to limitations in the data. In November 1998, MEASURE Evaluation held a workshop in Nairobi in order to evaluate the use of the census for maternal mortality measurement. Experts who were involved in data collection and those who were experienced with comparative demographic data analyses participated in the workshop. This publication presents on the discussions and findings of this workshop. Experiences with measuring maternal mortality using a census in developing countries are shared and recommendations are provided for using the census methodology for maternal mortality estimates.

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**Sampling Manual for Facility Surveys: For Population,**
Maternal Health, Child Health and STD Programs in Developing Countries

Health facility assessments or surveys allow for monitoring program performance and the use of resources, and evaluating the impact of programs. The facility data that are needed for program monitoring or evaluation must relate directly to the program catchment area, which has implications for sampling. This manual presents sampling methodology that can generate estimates of health facilities and their characteristics. Two sampling designs are described: sampling for stand-alone health facility surveys and sampling for linked health facility surveys.

- Using Lot Quality Assurance Sampling to Improve Immunization Coverage in Bangladesh

The objective of this study was to determine areas of low vaccination coverage in five cities in Bangladesh (Chittagong, Dhaka, Khulna, Rajshahi, and Syedpur).

- Compendium of Child Survival Monitoring and Evaluation Tools

This compendium of tools includes a variety of population- and facility-based assessment tools that can be used at different levels of the health system. There are a total of 24 child survival monitoring and evaluation tools available for downloading.

- Using Lot Quality Assurance Sampling to Assess Measurements for Growth Monitoring in a Developing Country's Primary Health Care System

This article describes a study in Costa Rica in which lot quality assurance sampling (LQAS) was used during routine household visits to assess the technical quality of Costa Rican community-based health workers: (1) measuring and recording weights of children, (2) interpreting their growth trend, and (3) providing nutrition education to mothers. This study demonstrates the strength of LQAS for easily identifying poorly functioning components of growth monitoring and promotion.
Needs Assessment of Emergency Obstetric and Newborn Care Toolkit

The Needs Assessment of Emergency Obstetric and Newborn Care (EmONC) Toolkit contains documents needed to plan for and conduct an EmONC needs assessment. Within the EmONC Toolkit you will find:

- **Data Collection Modules** consisting of standard questionnaires (modules) used to gather the data for an EmONC needs assessment.
- **Data Collector's Manual** providing detailed information about the study methodology, general rules for data collection, and a module-by-module guide to data collection.
- **Needs Assessment Facilitation Guide** intended to familiarize one with the entire EmONC needs assessment process, from advocacy and planning to conducting the needs assessment, dissemination, and action-planning.

mHealth

Resources:

- **MEASURE DHS Mobile App**

  MEASURE DHS mobile provides national-level DHS data for 25 key indicators across 90 countries, including fertility, family planning use, vaccination, childhood mortality, nutrition, HIV testing and prevalence, maternal health, ITN use, and some basic background data such as literacy, education, and access to electricity. The data can be viewed in a chart or a table to compare across countries or over time in countries that have had more than one DHS survey. These key indicators can also be viewed on a map.

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project output, and suggestions on how to evaluate the impact that mobiles are having on a project.

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- **African Programme for Onchocerciasis Control (APOC)**

This web page provides monitoring and evaluation information for the African Programme for Onchocerciasis Control.

**Neglected Tropical Diseases**

Resources:

- **Monitoring and Evaluation Facilitator's Guide**
The purpose of the Monitoring and Evaluation Facilitator’s Guide is to provide facilitators with guidance and tips on leading a monitoring and evaluation (M&E) knowledge and skills transfer course. The guide was designed to lead to an interactive, skill-building training and to improve the knowledge and proficiency of both new and experienced staff. The guide is part of a package that consists of the facilitator’s guide, PowerPoint slides, exercises/group work, and reference materials. All lesson materials are available for download by module and session. Modules include an overview of M&E, statistical concepts, and analysis, including qualitative and quantitative analysis.

- **Monitoring Treatment Coverage of Neglected Disease Control Programs**

  Regular monitoring of drug treatment coverage is essential to monitor progress towards program goals and to identify communities with poor or insufficient coverage. This toolkit presents a simple, easy-to-use and accurate population-based survey method to assess drug treatment coverage.

- **Performance of Predictors: Evaluating Sustainability in Community-Directed Treatment Projects of the African Programme for Onchocerciasis Control**

  This paper presents an analysis of participatory sustainability evaluations conducted for 41 African Program for Onchocerciasis Control projects. The evaluation specifically looked at predictors of sustainability of community-directed treatment with ivermectin (CDTI) at four implementation levels. The results suggest that community ownership is one of the important determining factors of sustainability of community-based programs.

- **Trachoma Control: A Guide for Programme Managers**

  This guide has been written for managers of national and district trachoma control programs. It sets out, step-by-step, what is needed to assess the magnitude and extent of the trachoma problem in the area and how to plan, implement, monitor and evaluate a program to control, and ultimately eliminate, trachoma.
Nutrition

Resources:

- **Understanding the Essential Nutrition Actions (ENA) Framework**

  This brief outlines the ENA framework and provides materials and other training materials on nutrition frameworks.

- **Indicators for assessing infant and young child feeding practices Part 2: Measurement**

  This document is a companion to the document Indicators for assessing infant and young child feeding practices. Part 1: Definitions published by WHO and partners in 2008. It provides tools for the collection and calculation of the indicators. It is intended for use by managers of large-scale population-based surveys that will collect information on the status of feeding practices among infants and young children less than 2 years of age.

- **Indicators for assessing infant and young child feeding practices Part 1: Definitions**

  This document presents new and updated indicators to assess infant and young child feeding practices at household level. It is hoped that the indicators will be widely used in large-scale population-based surveys in countries to assess progress in the implementation of the Global Strategy for Infant and Young Child Feeding and to measure the coverage of effective nutrition interventions in young children.

- **Measuring Mortality, Nutritional Status, and Food Security in Crisis Situations: SMART Methodology**

  The basic indicators for assessing the severity of a crisis are mortality rate and the nutritional status of a population. The SMART Methodology provides a basic, integrated method for
assessing nutritional status and mortality rate in emergency situations. This manual is
designed to provide agencies with the basic tools to collect the data necessary for planning
direct interventions in an emergency setting.

A Trainer's Guide to the Fundamentals of M&E for Population, Health and Nutrition Programs

Guide designed to assist health planner and evaluators to understand the concepts of capacity building and design capacity-building M&E plan.

Qualitative Research for Improved Health Programs: A Guide to Manuals for Qualitative and Participatory Research on Child Health, Nutrition, and Reproductive Health

This guide describes some of the existing manuals for conducting qualitative research on health and provides information to help would-be users select the manuals that are most appropriate to their needs.

Reproductive Health/Family Planning

Resources:

A Guide to Identifying and Documenting Best Practices in Family Planning Programs

?Best practices? are exemplary public health practices that have achieved results, and which need to be scaled up so as to benefit more people. The expansion and institutionalization of successfully tested best practices requires strategic planning. There are several creative and constructive actions by people and organizations in the health sector to improve the health outcomes of people. Disseminating knowledge of such actions widely may prevent the repetition of mistakes and loss of valuable time. Thus, the main rationale for documenting
and sharing "best practices" is to enable persons and organizations working in the health sector to avoid reinventing the wheel; to improve performance and avoid the mistakes of others.

- **Family Planning and Reproductive Health Indicators Database**

  The Family Planning and Reproductive Health Indicators Database provides a comprehensive listing of the most widely used indicators for evaluating family planning and reproductive health programs in developing countries. For each indicator the Database includes: a definition, data requirements, data sources, the purpose, and any issues with the indicator.

- **Lot Quality Assurance Sampling for Monitoring Coverage and Quality of a Targeted Condom Social Marketing Programme in Traditional and Non-Traditional Outlets in India**

  This study reports on the results of a large-scale targeted condom social marketing campaign in and around areas where female sex workers were present in selected parts of India. The paper describes the use of the lot quality assurance sampling (LQAS) method for routine monitoring of condom availability in the study sites. The researchers concluded that using LQAS was a simple and easy method that allowed for informed decision-making based on regular updates on the progress of condom availability within the defined coverage areas.

- **Study design for the Measurement, Learning and Evaluation project. Policy brief.**

  This policy brief outlines the project's hybrid study design and its intended impact. The project's hybrid design integrates cross-sectional and longitudinal data to assess the direct impact of innovative family planning programs and identify any change in the contraceptive prevalence rate and behavioral and attitudinal norms in intervention cities over the course of the Urban Reproductive Health Initiative (Urban RH Initiative). These design elements allow the MLE project to measure programmatic impact across cities, over time, and among the urban poor and non-poor.
A Guide for Monitoring and Evaluating Population, Health and Environment (PHE) Programs

Training module designed to increase understanding of the basic concepts and practical approaches for performance monitoring and evaluation for integrated PHE programs. Teaches tools and techniques used to monitor these programs.

*NOTE: Requires login and completion of fundamental course: http://www.cpc.unc.edu/measure/resources/training/materials/basic-me-concepts-portuguese/ME%20Fundamentals%20-%20MENTOR.pdf/view

- Counting Abortions so that Abortion Counts: Indicators for Monitoring the Availability and Use of Abortion Care Services

This article describes Safe Abortion Care (SAC) services — contraception and safe abortion to prevent and manage unwanted pregnancies, and prompt and proper treatment of complications. The article also includes a proposed model for monitoring the implementation of SAC services.

- Measuring Family Planning Sustainability at the Outcome and Programme Levels

This paper examines the validity of two indices of sustainability, family planning program sustainability and outcome sustainability, and discusses the potential for the indices to be used as a policy tool to inform funding decisions.

- Sampling Manual for Facility Surveys: For Population, Maternal Health, Child Health and STD Programs in Developing Countries

Health facility assessments or surveys allow for monitoring program performance and the use of resources, and evaluating the impact of programs. The facility data that are needed for program monitoring or evaluation must relate directly to the program catchment area, which
has implications for sampling. This manual presents sampling methodology that can generate estimates of health facilities and their characteristics. Two sampling designs are described: sampling for stand-alone health facility surveys and sampling for linked health facility surveys.

- **Quick Investigation of Quality: A User’s Guide for Monitoring Quality of Care in Family Planning**

  The Quick Investigation of Quality (QIQ) was developed as a low-cost and practical way to assist programs in routinely monitoring the quality of care (QC) in family planning programs. The QIQ includes a list of 25 indicators that programs can use to assess (QC). The indicators can be measured by facility audit, observation or exit interviews. The 25 indicators together provide a comprehensive picture of QC within a facility.

- **Monitoring Quality of Care in Family Planning Programs: A Comparison of Observations and Client Exit Interviews**

  Monitoring quality of care in family planning programs is important, but can be challenging and complicated. The Quick Investigation of Quality (QIQ) was developed to monitor quality of care by using observations of client-provider interactions, exit interviews with clients, and facility audits. This article describes an analysis examining the comparability of results of the QIQ from observations and exit interviews of program clients in Ecuador, Uganda and Zimbabwe.

- **Guide to Monitoring and Evaluating Adolescent Reproductive Health Programs: Part 2**

  This guide is designed for program managers who monitor and evaluate adolescent reproductive health programs. Part II of the guide offers guidance on adapting instruments for monitoring and evaluation of the program, provides sample data collection instruments, and gives tips for collecting data through a variety of methods.

- **Assessing Family Planning Service-Delivery Skills in Kenya**

  This report demonstrates the use of Lot Quality Assurance Sampling (LQAS) to evaluate the
technical competence of two cohorts of family planning service providers in Kenya trained with a new curriculum.

- **Evaluating Family Planning Programs with Adaptations for Reproductive Health**

This manual is intended to promote the use of program evaluation and evaluation results to inform program management, strategic planning, the design of new projects or initiatives, and resource allocation. The manual is designed to assist health professionals, such as program administrators and managers, in developing a better understanding of what program evaluation is and why it is important, and how to design and implement an evaluation plan.

- **The Reliability of the Situation Analysis Observation Guide**

This article reports on the reliability of observational data used to conduct a situation analysis. The assessment of the inter-rater reliability of observational data from a study in Turkey is described.

- **Indicators for Reproductive Health Program Evaluation**

This resource includes a collection of key indicators identified for monitoring and evaluating reproductive health interventions within the areas of: 1) Safe Pregnancy, 2) STD/HIV, 3) Women’s Nutrition, 4) Breastfeeding, and 5) Adolescent Reproductive Health Services. A review of the conceptual framework used for developing the list of indicators as well as a review of the issues with measurement and types of data sources for the indicators are included.

- **Handbook of Indicators for Family Planning Program Evaluation**

This Handbook provides a comprehensive collection of indicators for evaluating family planning programs in developing countries. The indicators are organized according to the components of the Conceptual Framework of Family Planning Demand and Program Impact on Fertility developed by The EVALUATION Project. The components include:
Health and Family Planning Indicators: Measuring Sustainability

Sustainability is often the ultimate goal of a program. This document provides a list of potential sustainability indicators for health and family planning programs. It is intended to guide program managers in selecting appropriate sustainability indicators during program design and program assessment activities. Each of the indicators in this document includes a detailed definition, narrative on its use and relationship to sustainability, and a proposed data source.

Water and Sanitation

Resources:

- Evaluating the Health Impact of Urban WASH Programmes: An Affordable Approach for Enhancing Effectiveness

This paper discusses how to measure impact, instead of outputs, for specific WASH interventions. The authors go on to suggest study designs for demonstrating health impact.

- WaSH MEL (Measurement Evaluation Learning)
The WaSH MEL project is dedicated to creating, sharing, and implementing cutting-edge monitoring, evaluation, and learning (MEL) tools for water, sanitation, and hygiene (WaSH) practitioners. Provides a virtual learning center and other tools resources for monitoring, evaluating, and improving sustainable access to WaSH around the globe.

- **A Toolkit for Monitoring and Evaluating Household Water Treatment and Safe Storage Programmes**

This tool addresses the gap in the need for consistent and harmonized M&E of household water treatment and safe storage interventions. This document addresses the gap by recommending indicators and providing examples of conducting M&E on household water treatment and safe storage programs.

- **Background Paper on Measuring WASH and Food Hygiene Practices ? Definition of Goals to be Tackled Post 2015 by the Joint Monitoring Programme**

Guide intended to help trainers teach program managers, staff and other decision makers the fundamental elements and techniques of M&E, with a focus on population and health programs. The document is divided into three modules: introduction to M&E, developing plans for M&E: frameworks, and developing plans for M&E: indicators and data systems.

- **Managing the Flow of Monitoring Information to Improve Rural Sanitation in East Java**

This resource describes the development and implementation of a community-based participatory outcome monitoring system in East Java for monitoring progress toward open defecation free status and tracking changes in community access to improved sanitation. The system is designed to link community-based participatory monitoring data with a district-level database. The document reviews how the community-based participatory outcome monitoring system works and shares progress and lessons learned based on implementation to date.

- **Access and Behavioral Outcome Indicators for Water,**
Sanitation, and Hygiene

The content of this document reflects the evidence that has accumulated to date on how to measure in a reliable and valid way hygiene practices that are critical for the prevention of diarrheal disease and the reduction of child morbidity and mortality.

- Best Practices and Lessons Learned from Sanitation Programming at USAID: An Annotated Bibliography

This annotated bibliography is a compilation of selected documents produced by USAID water, sanitation, and hygiene programs from 1980s to present. It covers a wide range of relevant topics from sanitation policy and reform to sanitation and capacity building. This document has a special focus on best practices, lessons learned, and evaluation reports from USAID’s global experiences in water, sanitation, and hygiene. [excerpt]

- Global Learning Strategy

The Global Learning Strategy is intended to serve as a structured process of generating, sharing, capturing, and disseminating knowledge about what works in scaling up and sustaining sanitation programs. Within this resource is a discussion on learning goals and principles; learning culture, tools and platforms; the learning process; and the organizational aspects of learning.

- Adapting Life-Cycle Thinking Tools to Evaluate Project Sustainability in International Water and Sanitation Development Work

This paper presents a framework for identifying and analyzing factors that affect sustainable development of water and sanitation projects. Five common sustainability factors are identified and a life-cycle approach is used to assess how project sustainability can be improved throughout the project life. Together, the sustainability factors and life-cycle stages form an assessment matrix used to score the sustainability of a project.

- A Guide to Water and Sanitation Sector Impact
Evaluations

The use of impact evaluations is promoted to demonstrate the effectiveness of water supply and sanitation (WSS) policies and programs. This guide is designed to assist users in developing an understanding of impact evaluations and to assist in designing and implementing WSS impact evaluations. Sections are included on impact evaluation methodology and a review of the common challenges in conducting WSS impact evaluations.

Core Questions on Drinking-Water and Sanitation for Household Surveys

Safe water and adequate sanitation are basic to the health of every person on the planet, yet many people throughout the world do not have access to these fundamental needs. An important step towards resolving this global crisis is to understand its magnitude: how many people lack access to drinking-water and sanitation? To help answer this question, household surveys and censuses are conducted every year throughout the world to assess drinking-water, sanitation, and hygiene-related practices at the household level. Because of variations in survey tools, attempts to compare the results of one survey with those of another have been fraught with difficulties. Solving survey comparability problems is crucial if we are to establish accurate trends over time within a country, and compare data between countries. For this reason, the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation developed a set of harmonized survey questions that helps to resolve the comparability problems of the past. Including the harmonized questions in national surveys and censuses will help countries gain more systematic information on the drinking-water and sanitation needs of their population. Used widely, these harmonized questions will make data across international and national survey programmes more comparable, which in turn will result in more accurate country, regional and global estimates of unmet drinking-water and sanitation needs. The core harmonized questions presented in this guide have been adopted by the Demographic and Health Surveys, the Multiple Indicator Cluster Survey, and the World Health Survey. The purpose of this guide is to encourage more widespread use of these harmonized questions.

Guidelines for the Development of Small-Scale Rural Water Supply and Sanitation Projects in East Africa

This document constitutes general guidelines for the planning and implementation of small-scale water supply and sanitation activities in rural East Africa, which includes both projects funded under the USAID Title II (Food for Peace) Program and projects funded by other donors. It is intended to assist Catholic Relief Services (CRS) and its partners in improving
the effectiveness, environmental protection and long-term sustainability of water and sanitation activities in the rural, and often food-insecure, areas of East Africa.

- **Water and Sanitation Indicators Measurement Guide**

  This Guide is intended to facilitate consistent measurement of a set of generic water and sanitation-related monitoring and evaluation performance indicators. For each indicator presented in this Guide, a definition is included along with a description on how to calculate the indicator, sources of data for the indicator, issues with the indicator, and target values for the indicator.

- **PHAST Step-By-Step Guide: A Participatory Approach for the Control of Diarrhoeal Diseases**

  This guide outlines and describes a seven step process communities can use for developing a plan to prevent diarrheal diseases by improving water supply, hygiene behaviors, and sanitation. The process includes developing a monitoring and evaluation plan.

- **Health-Care Waste Management Rapid Assessment Tool**

  This rapid assessment tool is a part of an overall strategy developed by the World Health Organization that aims to reduce the disease burden caused by poor health care waste management through the promotion of best practices and the development of safety standards. This tool can be used to gather information to provide decision-makers, experts, and others with the necessary data to help develop a national action plan to manage health care waste.

- **Research and Monitoring and Evaluation**

  Although research is not a HIP priority, the project will engage in limited operations research where the gaps are greatest. In addition, formative research may be necessary at a country level to develop appropriate behavior change strategies.

- **WHO / UNICEF Joint Monitoring Programme (JMP) for**
Water Supply and Sanitation

This website is a resource for decision makers, researchers, and civil society at large to learn about the JMP's activities, the status of water supply and sanitation coverage and its importance for our health and well-being, and to obtain detailed statistics about the use of water and sanitation facilities at different scales (global, regional and country-level).

Source URL: https://www.k4health.org/toolkits/measuring-success