Data Quality Assurance

Strategies for improving public health M&E capabilities

At MEASURE Evaluation, we believe that improved analysis and use of data lead to better health program decision-making and, ultimately, improved health outcomes. MEASURE Evaluation has developed innovative tools for strengthening the monitoring and evaluation (M&E) of public health interventions.

National public health programs and donor-funded projects are working together to achieve ambitious goals for the care and treatment of patients with HIV/AIDS, tuberculosis, or malaria, and the prevention of new infections. Resources for these vital programs are finite, and must be managed wisely. Consequently, funding has been increasingly tied to performance, and program managers must show effectiveness to warrant continued investment. The quality of data generated by monitoring and evaluation systems is imperative if program effectiveness is to be evaluated accurately. However, many national programs and implementing partners are new to reporting results, and need effective tools for assuring the quality of their data.

To address the need for good quality data for public health programs, MEASURE Evaluation and collaborating partners have developed a suite of tools for strengthening M&E systems, and assessing and enhancing data quality. These data quality assurance tools and methods enable programs and projects to evaluate the quality of data for selected priority indicators and identify problem areas to target for system strengthening activities.

Data Quality Assurance Tool for Program-Level Indicators — This tool addresses the essential parameters of data quality assurance needed within the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) system of results reporting. It provides an overview of the data quality assurance tools for PEPFAR program-level Indicators. The tool focuses primarily on two data-quality issues intrinsic to PEPFAR's monitoring and evaluation needs: the "upstream" and "downstream" framework for target setting and results reporting; and concerns involving double-counting of data.

Data Quality Audit (DQA) Tool and Routine Data Quality Assessment (RDQA) Tool — The MEASURE Evaluation data quality portfolio includes auditing tools (DQA) designed for use by independent audit teams, and self-assessment tools (RDQA) that facilitate capacity building and other flexible uses.

The data quality tools have both qualitative and quantitative assessment components, which enable a holistic review of data quality and the strengths and weaknesses of the information system. The DQA includes a guide, *Data Quality Audit Tool: Guidelines for Implementation*, and a series of indicator-specific data verification templates in Microsoft Excel tailored for specific diseases, such as HIV/AIDS, tuberculosis, or malaria. The Global Fund for AIDS, Tuberculosis and Malaria uses the DQA as part of its performance based funding mechanism and is available in English,

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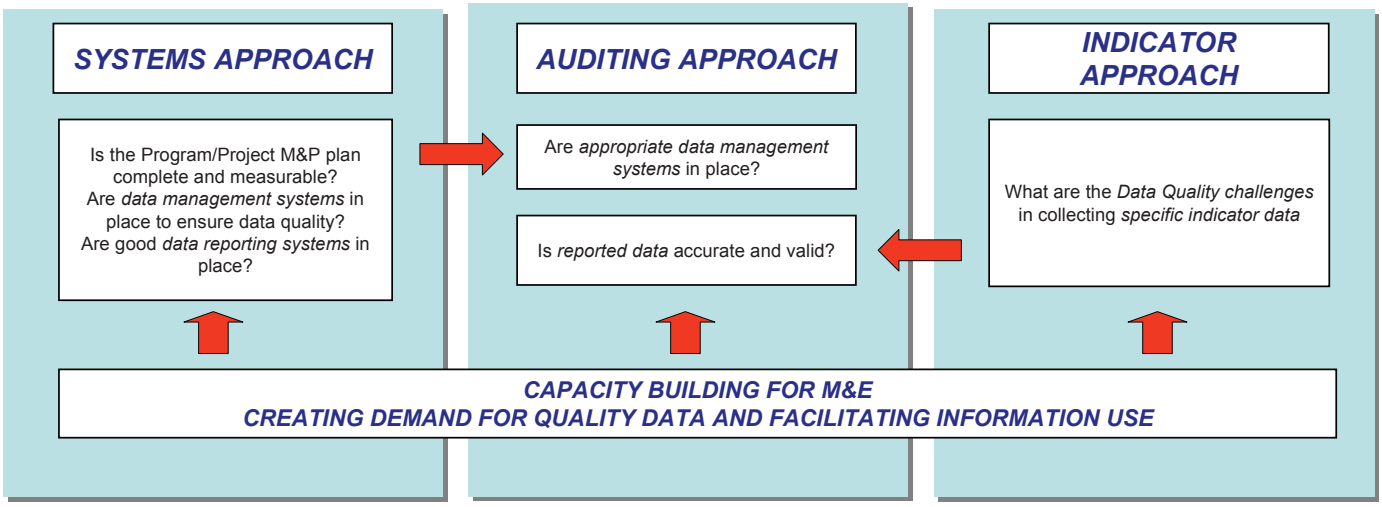
Framework for Improving Data Quality



Impoving data quality requires attention to the systems that produce the data and dimensions of the indicators that may be subject to data quality challenges (such as double counting of individuals served and incorrectly counting those served directly and indirectly through program interventions). Furthermore, data quality audits can help periodically assess the accuracy, reliability, comprehensiveness, timeliness, and integrity of information reported through programs.

French and Spanish. The DQA was developed collaboratively with the global fund, World Health Organization (WHO), the Joint United Nations Programme on HIV/AIDS (UNAIDS), and PEPFAR.

The RDQA is designed as a capacity-building and self-assessment version of the DQA tool. The RDQA enables national programs or donor-funded projects to evaluate their own data quality, improve the performance of reporting, and prepare for data quality audits. The RDQA facilitates the identification of problem areas and the creation of M&E system strengthening action plans. The RDQA includes the *Routine Data Quality Assessment: Guidelines for Implementation* and its Microsoft Excel template, a checklist and automated dashboard to assist in interpreting assessment results. The RDQA is also available in French and Portuguese. Collaborating with MEASURE Evaluation in developing the RDQA were the Office of the Global AIDS Coordinator, PEPFAR, the global fund, and the WHO.

Monitoring and Evaluation Systems Strengthening Tool — The Monitoring and Evaluation Systems Strengthening Tool (MESST) is designed to evaluate the components of an M&E system (e.g., an overall M&E plan, data management capacity, and data reporting streams) through a facilitator-moderated national stakeholders' workshop. MESST helps identify strengths and weaknesses in an M&E system and facilitates the development of a system-strengthening work plan. Since 2007, MESST has been part of the global fund's performance-based funding mechanism and is a prerequisite for mid-term funding evaluations. The global fund and PEPFAR collaborated with MEASURE Evaluation to develop this tool. MEASURE Evaluation has also helped develop an enhanced version of MESST for UNAIDS, designed specifically for HIV/AIDS programs: *12 component M&E System Strengthening Assessment Tool*.

These tools are available from the MEASURE Evaluation Web site at:
www.cpc.unc.edu/measure/tools/monitoring-evaluation-systems/data-quality-assurance-tools

FOR MORE INFORMATION

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