

Data for Impact Starts with High-Quality Data

June 2019

Data for Impact (D4I) works in low-resource settings to ensure that when information is needed, reliable data exist to answer the question. When good-quality data are available, people are able to conduct useful analyses and develop communication strategies and data visualizations that contribute to program and policy decision making.

D4I conducts data quality assessments (DQAs), in collaboration with local stakeholders, and ensures that the results provide a clear picture of any data limitations so that appropriate data improvement plans can be designed and implemented. Here's how:

- We advise partners on the most appropriate DQA approaches and tools to meet their objectives.
 - It can be challenging for countries to know which approach to choose. This Menu of Tools for Data Quality Assessment and Review, which includes general cost estimates for different approaches, can help: <u>https://www.data4impactproject.org/cpc-</u>

nttps://www.data4impactproject.org/cpcpublication/a-menu-of-tools-for-data-qualityassessment-and-review/

- We adapt existing DQA tools to suit the purpose—for example, adaptations for assessments of specific health areas or across multiple areas. We also assess gender-related, sex-disaggregated, and geospatial data quality
 - Countries use age- and sex-disaggregated data and gender-sensitive indicators to understand the needs of diverse populations, their access to services, and improvements in their health outcomes. The Routine DQA plus Gender (RDQA+G) Tool adds to the standard DQA measures to examine if staff have received training on gender mainstreaming, if programs have adapted for gender, if guidelines exist for handling gender-sensitive data, and if data are analyzed by sex and age:

<u>https://www.data4impactproject.org/cpc-</u> <u>publication/gender-integrated-routine-data-</u> <u>quality-assessment-rdqag-tool/</u>

• The tool was tested in two countries. Read about the experience in these summaries: Pilot-Testing a Gender-Integrated Routine Data Quality Assessment Tool in Zambia: Summary of the Results:

https://www.data4impactproject.org/cpcpublication/pilot-testing-a-gender-integratedroutine-data-quality-assessment-tool-in-zambiasummary-of-the-results/ Pilot-Testing a Gender-Integrated Routine Data Quality Assessment Tool in Kenya: <u>https://www.data4impactproject.org/cpc-</u> <u>publication/pilot-testing-a-gender-integrated-</u> <u>routine-data-quality-assessment-tool-in-kenya/</u>

- We support programs in countries funded by the United States President's Emergency Plan for AIDS Relief (PEPFAR) to implement the expedited DQA, a tool MEASURE Evaluation developed for rapid program course corrections and monitoring if programs improve.
 - The report—Improving the Quality of Zambia's Clinical Care Data: Findings from Expedited Audits of Data Quality in 93 Health Facilities in October 2017—shows how the expedited DQA was implemented in 24 days to verify the number of adults and children receiving antiretroviral therapy for HIV/AIDS (TX_CURR) and to assess progress for improving data quality: https://www.data4impactproject.org/ cpc-publication/improving-the-quality-of-

zambias-clinical-care-data-findings-fromexpedited-audits-of-data-quality-in-93-healthfacilities-in-october-2017/_

- We support partners to assess data quality in digital systems and establish robust automated data quality checks in those systems.
 - A case study in Bangladesh provides insights about its transition from a paper-based to an electronic health information system and how the system reduced transcription errors and further improved data quality through built-in validation rules and data completeness checks: Bangladesh's Electronic Management Information Systems: Using Digital Technology to Link Community Data with Facility Data: Case Study

https://www.data4impactproject.org/ cpc-publication/bangladeshs-electronicmanagement-information-systems-using-digitaltechnology-to-link-community-data-with-facilitydata-case-study/

• We use a learning-by-doing approach to strengthen partner capacity to conduct assessments of data quality and interpret the results. We add opportunities for more learning and training, coaching, and mentoring.





- D4I's role is to assist individuals and institutions to assess, plan, and implement strategies to strengthen or enhance their current ability to generate evidence, ensure data quality, integrate gender, and promote data use. This document outlines the Data for Impact Approach to Institutional Strengthening: <u>https://www.data4impactproject.org/cpcpublication/data-for-impact-approach-toinstitutional-strengthening/</u>
- We tailor our data quality approaches to enable rapid assessments by focusing on a limited number of indicators, by using lot quality assurance sampling (LQAS), or by conducting pilot tests to discover if more in-depth assessments are needed and how to conduct them.
 - An experience in Burundi used LQAS in six highvolume, PEPFAR-supported facilities over five days to assess the data quality of three indicators. LQAS saved staff time by using a sample of client records to verify quality rather than by reviewing all records:

Data Quality Assessment (DQA) for HIV Program Indicators in Burundi

https://www.data4impactproject.org/cpcpublication/data-quality-assessment-dqa-for-hivprogram-indicators-in-burundi-final-report/

- We specialize in the design, assessment, implementation, and performance monitoring of systems to collect community-level data, including systems that collect data through mobile devices, to ensure the data are of high quality.
 - To strengthen community-based information and data from mobile systems, this guidance helps users design systems that produce quality data, assess systems, use data to implement programs, and conduct routine data quality checks: Improving Data Quality in Mobile Community-Based Health Information Systems—Guidelines for Design and Implementation https://www.data4impactproject.org/cpcpublication/improving-data-quality-in-mobilecommunity-based-health-information-systemsguidelines-for-design-and-implementation/

• When requested support is outside the scope of D4I, we can help link USAID missions to other projects for assistance. Tasks outside our scope include assessing routine health information systems or other information systems; integrating DQA guidance and policies into standard operating procedures; and developing and implementing policies for data standards, privacy, and security.

For more information on types of data quality assessment tools, download the publication, Comparative Analysis of Data Quality Assessment Tools, here: https://www.data4impactproject.org/cpc-publication/ comparative-analysis-of-data-quality-assessment-tools/

A suite of data quality tools is available here:

https://www.measureevaluation.org/resources/tools/dataquality/

For more information about D4I, visit www.data4impactproject.org

