

Health Informatics

Quality data are essential in public health settings to facilitate good decisions on policy and service provision and to track health trends and the effectiveness of interventions. Health informatics (HI), sometimes called “digital health,” “eHealth,” or “mHealth,” is a health information system empowered and amplified by technology.

HI encompasses data acquisition, storage, retrieval, analysis, and use to improve patient care and assist countries to achieve better health for their citizens. HI can facilitate:

- Access to multiple data sources
- Data sharing
- Data visualization
- Data quality assessment and improvement

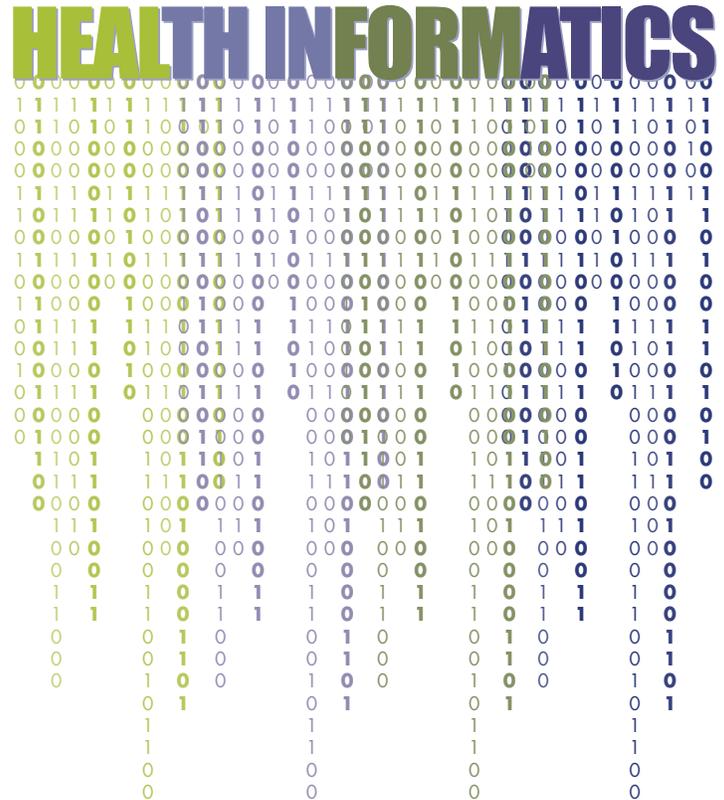
What role does MEASURE Evaluation play?

MEASURE Evaluation is USAID’s primary mechanism for strengthening health information systems and is contributing thought leadership and support for the implementation of HI. We focus on overcoming challenges to developing strong national health information systems and help to create the enabling environment so such systems can develop. We also are helping countries to establish program-specific systems, such as for malaria, especially where a full HI system is not yet possible but where the need for subsets of data is critical.

HI is an emerging discipline and is changing and evolving quickly. How well it develops into a sharable, scalable platform will depend, in part, on rules being set down now. MEASURE Evaluation is helping to set standards and guidance for HI applications and to develop policy and practice on privacy protections.

In low-resource countries, we are helping to apply principles and standards, including:

- *An enterprise architecture approach:* We advocate readily obtainable software upon which planners can design systems that will strengthen HIS in a particular setting.



- *Privacy, confidentiality and security:* These are a hallmark of quality enterprise systems, meant to ensure that people are treated fairly and their personal data are secure.
- *Focus on priority information needs:* We have strong relationships with governments, donors, and health services providers globally and are adept at stakeholder engagement to “hear” what decision makers need and want to know so that data are relevant.
- *Interoperability and standards:* We encourage interoperable systems, if there is adequate connectivity, so that data from all sources of information can be shared.
- *Collaborative communities:* We participate in and foster strong professional networks, such as OpenHIE (Open Health Informatics Exchange) to share best practices for strengthening country HI.

Examples of our work:

Data for Accountability Transparency and Impact (DATIM) is a data collection system led by the US Government and the Office of the Global AIDS Coordinator (OGAC) that brings together a consistent set of elements from monitoring, evaluation, and reporting (MER) indicators, site improvement through monitoring systems (SIMS), and expenditure analysis (EA). MEASURE Evaluation is supporting the installation of DATIM through training of local implementers, supporting system architecture and the website interface, and the development of automated data exchange. We work with a variety of partners, including the University of Oslo and OpenHIE.

Swaziland

In Swaziland, MEASURE Evaluation and a local USAID implementing partner, the Institute for Health Measurement/Southern Africa (IHM), are supporting the Ministry of Health (MOH) to develop a Client Management Information System (CMIS). This system will harmonize disparate data into a patient-based record for reporting into the DHIS-2. The system will improve access to timely, quality data, reduce duplication of cases, and improve patient flow and wait times. CMIS also can enhance integration and availability of patient data, improve efficiency and cost effectiveness, and enable systems to deal with a more complex and rapidly changing environment.

South Africa, MomConnect

Subsets of HI systems, such as mobile messaging mHealth solutions, are useful even before HI is fully implemented. South Africa's MomConnect program is a case in point. With a mobile phone, women enroll in the program and receive text messages throughout their pregnancy and their child's first year of life. The program has the potential to expand the number of women receiving adequate prenatal care, track mothers who are HIV positive to ensure they receive treatment to prevent transmission to their babies, and to follow high-risk pregnancies.

MEASURE Evaluation Strategic Information for South Africa (MEval-SIFSA) is supporting MomConnect and, further, the adoption of the proposed nationwide mHealth strategy. We provide technical assistance to help address challenges, especially in HIV programming, and to help develop an open and transparent repository of mHealth projects and stakeholder forums. The project is producing practical products on interoperability design, privacy and security considerations in design, good practices for messaging and materials, and good practices in providing mobile devices to providers.

How can you access MEASURE Evaluation's resources?

MEASURE Evaluation tools and approaches are available free of charge on the project website:

www.measureevaluation.org. Moreover, the project is available to tailor activities and tools to the particular needs of a country. To explore the possibilities, country governments should contact their local USAID mission. The missions, in turn, can contact the USAID AOR for MEASURE Evaluation, Lisa Maniscalco (lmaniscalco@usaid.gov).

MEASURE Evaluation is funded by the U.S. Agency for International Development (USAID) under terms of Cooperative Agreement AID-OAA-L14-00004 and implemented by the Carolina Population Center, University of North Carolina at Chapel Hill in partnership with Futures Group, ICF International, John Snow, Inc., Management Sciences for Health, and Tulane University. The views expressed in this presentation do not necessarily reflect the views of USAID or the United States government. FS-15-141

