



Health Management Information Systems

President George W. Bush's Emergency Plan for AIDS Relief is the largest commitment ever by any nation for an international health initiative dedicated to a single disease -- a five-year, \$15 billion, comprehensive approach to combating the disease around the world.

U.S. Department of State

U.S. Agency for International Development

U.S. Department of Defense

U.S. Department of Commerce

U.S. Department of Labor

U.S. Department of Health and Human Services

Peace Corps

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Accountability is an essential component of the U.S. President's Emergency Plan for AIDS Relief (Emergency Plan/PEPFAR). It serves as the foundation for policy development, program implementation and improvement, mid-course program adjustments, and the identification and promotion of best practices. It also helps to shape future funding decisions.

Those countries receiving more than one million dollars in HIV funding annually report on a menu of 41 core indicators within the program areas in which activities are taking place. Every six months, each of the 15 focus countries uses an online database to record current data on a set of core indicators; this information is used to continually monitor and evaluate progress against U.S. Government (USG)-supported targets by program area.

Across all program areas, community program and health care delivery personnel often face competing demands that make the collection and recording of daily service delivery data a challenge. Many countries lack robust health management information systems, and the related information and communications technology infrastructure needed to access and report high-quality data.

PEPFAR supports health management information systems activities that build on existing data and information system standards and infrastructures in program countries. Activities are spearheaded by a technical working group, which coordinates programs across USG agencies and multilateral organizations, such as the UN Joint Programme on HIV/AIDS (UNAIDS), the Global Fund to Fight AIDS, Tuberculosis and Malaria, the World Health Organization (WHO), and the World Bank.

The Emergency Plan works with host governments, implementing partners and others to:

- Develop human and organizational capacity;
- Strengthen human resources and training information systems;
- Identify and promote best practices and new technologies;
- Support efforts to harmonize data elements and core data sets;
- Collect core indicator data to inform clinic/program management decisions;
- Document in-country HIV-related HMIS;
- Design country-level systems that integrate patient management, lab services, supply chain management and program indicator systems;
- Provide country-specific support for decision-making, implementation and systems maintenance for service delivery and supply chain management; and
- Identify, evaluate and promote the use of appropriate information system technologies to support innovative PEPFAR technical and program management strategies.



The Emergency Plan at Work

The following examples illustrate how PEPFAR is working in partnership with host nations to support health management information systems activities:

- **Patient Monitoring Guidelines for HIV Care and Antiretroviral Treatment.** The PEPFAR-supported Patient Monitoring Guidelines for HIV Care and Antiretroviral Therapy provide a recommended, standardized minimum data set and a simple, paper-based system that is well-suited to scale-up. They will improve patient monitoring, the collection and use of key outcome indicators, and the quality of treatment and care services. The guidelines have been endorsed by the U.S. Agency for International Development (USAID), WHO, UNAIDS and other international partners, and are being implemented in Cote d'Ivoire, Ethiopia, Kenya, Nigeria, Tanzania, Uganda, Vietnam and Zambia. Electronic tools which supplement and support the paper forms and registers are being developed.
- **CareWare is a free, client-level software program for monitoring HIV clinical and supportive care.** Initially released in 2000 for use in the U.S., it tracks information on demographics, service visits and basic clinical data, and produces core indicator reports. Major clinical modules and reporting functions have been added over time. In 2006, a new version was released, which can be configured on stand-alone computers, wide area networks or the Internet. The new version enables users to access pharmacy prescriptions, monitor medication inventory, schedule patient appointments, and create a patient medication regimen. Its Quality of Care module provides language translation, tracks HIVQUAL indicators, and includes the ability to customize forms to look like local data entry screens. CareWare is being implemented in Honduras, Kenya, Nigeria, Russia, Tanzania, Thailand, Uganda, Vietnam and Zambia.
- **Community Level Program Information Reporting.** This program information reporting tool kit provides all the necessary tools to implement a non-facility, community-level information system for reporting core indicators. Host country government partners collect this information in the spirit of the Three Ones, to support a single national monitoring system for all HIV activities within each country. This system was initiated in Haiti, Kenya, Nigeria, Tanzania, and Zambia in fiscal year 2006.
- **Guidelines to Ensure Confidentiality and Security of HIV-Related Information.** These guidelines were developed by an international consulting group and focus on data that is collected for patient management and monitoring. They also address monitoring and evaluation of programs and HIV services to facilitate scale-up of HIV services in middle- and lower-income countries. In fiscal year 2007, these Guidelines will be piloted in selected PEPFAR countries.
- **Logistics and Health Program Management Information Platform.** This integrated information platform, which is based on portal technology, is one of several country-level monitoring systems currently being implemented. The platform facilitates timely collection and analysis of data from the field and sends key programmatic and logistical information back to the field. It also gives HIV/AIDS program managers the data they need to plan effectively and make informed decisions. Implementation of the platform began in Nigeria in fiscal year 2006.
- **Geographic Information Systems.** The Emergency Plan is supporting the development of a spatial data repository to provide electronic files to map results data, show geographic coverage, and inform program planning. The project includes the production of digital subnational administrative boundaries, with population data from the U.S. Census Bureau's International Database. It also will compile available health facility geographic points across the Emergency Plan countries.