HMIS Scale-Up in Ethiopia

1 | **HEALTH MANAGEMENT INFORMATION SYSTEMS (HMIS) IN ETHIOPIA**

The Health Management Information System and Monitoring and Evaluation (HMIS/M&E) strategy is one of the pivotal components of the Health Sector Development Program (HSDP) of the Federal Ministry of Health (FMOH). The FMOH adopted a "One Plan, One Report & One Budget" policy with the aim of improving management and optimum use of resources for making timely decisions as HMIS/M&E is a core component of effective health care delivery.

To this end, HMIS reform has been given paramount importance in the HSDP agenda. The reformed HMIS was designed, piloted and tested in 2006–2007 with technical assistance by John Snow, Inc. (JSI).

2 | **THE USAID-FUNDED HMIS SCALE-UP PROJECT**

At the request of the FMOH, USAID/Ethiopia asked JSI, through MEASURE Evaluation, to assist in the scale-up of the reformed HMIS/M&E in Southern Nations and Nationalities People's Region (SNNPR) and work with FMOH on strategies for a national Health Information System (HIS). Primary objectives of the project are to:

- Assist the Regional Health Bureau (RHB) of SNNPR with the implementation of the new HMIS/M&E so that managers and care providers at all levels use the new HMIS/M&E to produce quality data and use the information for planning and management of the health services
- Establish a computerized HMIS/M&E data processing and reporting system at national, regional, zonal and woreda levels in SNNPR
- Provide technical support to the Policy, Planning & Finance General Directorate of FMOH in coordinating the multi-partner scaling up of the HMIS/M&E.

3 | **IMPLEMENTATION STRATEGY: BUILDING REGIONAL OWNERSHIP**

The strategy for the successful implementation of HMIS/M&E in SNNPR is building regional capacity and sharing responsibilities among the Regional Health Bureau (RHB) and the project. This facilitates and promotes regional ownership for the sustainability of HMIS in the region. RHB of SNNPR is demonstrating ownership of HMIS by:

- Valuing HMIS and demonstrating desire to have HMIS for health system management
- Driving the system to get the desired benefits from it; for example:
  » SNNP RHB maintains production of quality HMIS information to meet the current information needs of the region
  » There is continued use of HMIS information for decision making at all tiers of health system
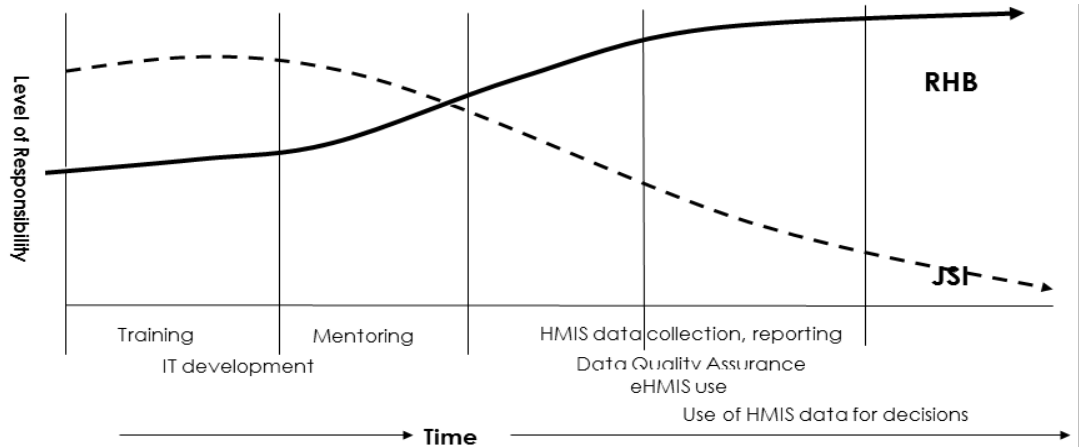- Taking responsibility for HMIS successes and failures

- Managing and maintaining the capacity to manage the HMIS resources and controls and financial decisions for HMIS implementation

4 APPROACH FOR PROMOTING REGIONAL OWNERSHIP

It is believed that the strategy for creating awareness over regional ownership was supported by a balanced sharing of responsibility so that regional ownership could be promoted from day one.

4.1 Level of Responsibilities within FMOH/RHB and USAID/MEASURE Evaluation (JSI) Partnership (Shared Responsibility)

Another effective strategy in the successful scale-up of HMIS in SNNPR is the system's approach. HMIS is scaled-up zone by zone so that the whole administrative unit is primed to one system rather than having fragmented HMIS within the same zone.

4.2 As of September 2011…

	RHB, ZHD, WorHO Managers	Hospital	Health Center
Facilities Completed TOT	22/22	23/23 (100%)	615/615 (100%)
Staff Trained	978	1,404	3,197
HMIS Implementing Facilities		11/23 (48%)	372/615 (61%)
Reporting Facilities		11/23 (48%)	372/615 (61%)

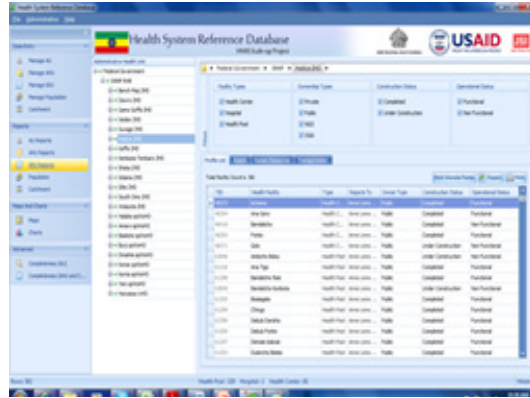## 5 ENHANCING IT SUPPORT—EHMIS (ELECTRONIC HEALTH MANAGEMENT INFORMATION SYSTEM)

SNNPR—Building eHMIS capacity of the region: Learning by doing—peer to peer.

eHMIS is a system that helps to accurately and timely enter, aggregate, store, analyze and evaluate health related data from health facility to federal level. eHMIS is composed of a set of interrelated components and procedures organized with the objective of generating health information and intelligence to monitor the health status and health services of the nation to improve public health care leadership and management decisions at all levels.

5.1   Health System Reference Database

This module, the Health System Reference Database (HSRD), provides population denominators for various catchment areas, health facility information and human resource information. Data for the whole SNNPR has been entered into the system and is readily available for updating and use. One important utility of HSRD is that it provides the necessary data on various denominators for the calculation of HMIS indicators.
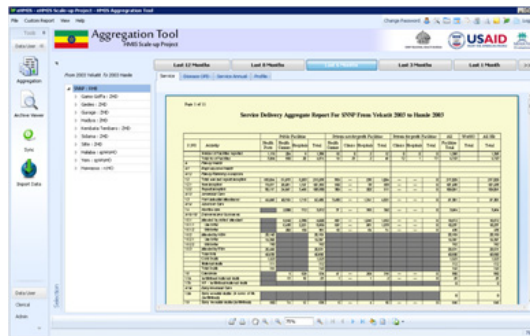
5.2   Data Entry Module

The Data Entry Module is made up of two subcomponents; the manual data entry and scanning which uses automatic character recognition to populate the HMIS database. The scanning of facility reporting forms is especially set to reduce the time the RHB spends manually entering data by a significant margin. This solution is expected to shift this current clerical task to more advance roles such as analyzing data for decision making and working on improving data quality.
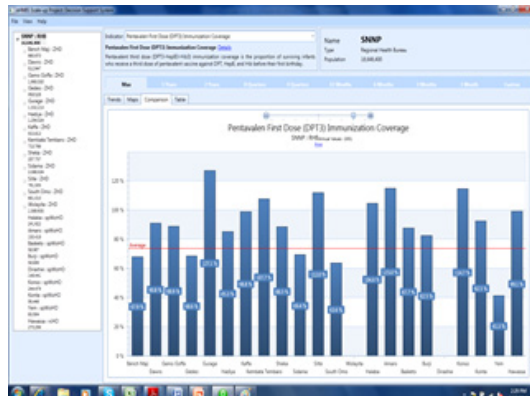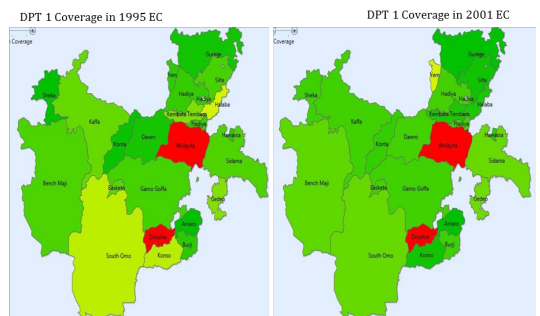
5.3   Aggregation Module

The Aggregation Module is an application that dynamically aggregates data entered via the Data Entry Module to provide woreda, zonal and regional aggregation for the month, quarter and year. The aggregation software is adding significant time savings and improvement to quality by reducing the time it takes to aggregate reports to a matter of seconds and virtually eliminating calculation errors that might occur if the task was to be done manually.

5.4   Decision Support System

DSS maps to compare Zonal DPT 1 performance in SNNPR

DPT 1 Coverage in 1995 EC   DPT 1 Coverage in 2001 EC

The Decision Support System (DSS) is the ultimate output of every eHMIS tool. The DSS is the dashboard that provides decision makers access to data collected that can be easily analyzed for effective and timely decision making. The DSS employs simple and yet powerful charting tools such as line, bar and maps to communicate information in a way that makes the thousands and millions of records in the database represented in simple user-friendly charts. In addition to the desktop DSS application, top level management can benefit highly from the Mobile Executive Decision Support System (MEDSS). The MEDSS will be installed on Android mobile devices supporting decision making to the highest standards.

6 COMMUNITY HEALTH INFORMATION SYSTEM

The Community Health Information System (CHIS) is an important part of the HMIS scale-up; it requires that each household in a community be numbered and families registered. Family Folder, part of the CHIS, is a family-centered tool designed for the health extension worker (HEW) to manage and monitor her work in educating households and delivering an integrated package of promoting preventive and basic curative health service to families.

The Family Folder is provided to each family. Information on household identification, data on family members and household characteristics in terms of environmental sanitation (latrine, hand washing facility, waste disposal, and drinking water source) and malaria prevention is recorded on the cover side of the Family Folder.

6.1 Implementation of CHIS Community Mobilization Practice

Through strong leadership of woreda administration and kebele organizers (ternafi), plenty of volunteers have been mobilized at every kebele on a non-financial basis and they have successful in managing Family Folder profiling.

Mobilizing Lemo woreda administration

Mobilizing kebele ternafi and volunteers

HEW supervisor conducting onsite training on Family Folder

Volunteer providing household number for each family

6.2   **Defaulter Tracing and Ensuring Continuity of Care**

Tickler file system is used for targeting clients with significant health episodes such as: Pregnancy, <2 child care, OVC, PLHIV and TB. Currently this system is tested in 6 health posts, where HEWs, HEW supervisors and woreda officials are quite comfortable with it.

6.3   **As of September 2011…**

Activities	Health Posts
HEW supervisors TOT completed	542/668 (81%)
Health Extension workers Trained	3,606
Implementing	1737/3896(44%)
Reporting	1737/3896(44%)

The greatest success comes from handing over the lead role to the Regional Health Bureau (RHB) that primarily owns the processes. The RHB planning unit has taken on the responsibility of managing the scale-up with the goal of promoting and facilitating the implementation of HMIS throughout the region.

The RHB IT staff are carrying out electronic data entry and quality checks while offering training and empowerment to HMIS facilitators in every zone, woreda and health facility.

The RHB is mobilizing other implementing partners to assist HMIS scale-up and sustainability by providing printing, furniture, computers and other resources that are essential for the realization of HMIS in the region. The RHB has also organized regular meetings to review scale-up progress and address bottlenecks.