HMIS Development - Conceptual Overview

This paper provides the "big picture" overview for HMIS development. This includes:

- What needs to be done in the short and medium term to make HMIS fully functional
- How the HMIS links to the broader strategic context
- How HMIS will be integrated and sustained over the long term

A five-year programme is envisaged. It is designed to achieve 100% coverage of districts within two years, followed by further refinement in terms of use and quality in years 3-5. This consolidation includes successfully solving institutional barriers to long-term sustainability. <add two sentence summary on the approach: rapid DHIS roll out followed by refinement>

By end of year two [2010], every district in TZ should have DHIS functioning and HMIS data available for 2009 and 2010 for all agreed indicators. By end of year five [2013], data quality will be improved, capacity to use data will be strengthened, the HMIS will have been refined, and vertical information systems will have been absorbed/aligned.

Short Term

Deliverable: Routine HMIS system operational in all districts using DHIS software that captures & aggregates a minimum essential health information data-set *based on existing HMIS registers and books*. The system will be able to generate standard user reports and feedback for all levels and maintain the full data set in a national health information "warehouse".

Tasks:

- 1. Put in place project team, project finance/accounts, equipment, project oversight arrangements
- 2. Key GOT staff designated with clear roles and responsibilities at central, regional, district levels
- 3. National HMIS strategic plan and budget framework developed
- 4. Agree minimum set of indicators (collectable from existing HMIS + vertical programs)
- 5. Define data flow model from PHC units and hospitals
- 6. Adapt DHIS software to capture, aggregate, analyse data & produce standard user reports *using existing HMIS registers* & *returns*
- 7. Design training scheme, training manuals, train trainers
- 8. Write software documentation, user guides
- 9. Procure hardware (national, regional, district) & set up the software
- 10. Conduct training of 2 "Health Information Officers (HIO)" for every district and region
- 11. District HIOs input prior year (2008) data on to the DHIS
- 12. Initial data use workshop for 4 "information users" for every district using past year's data
- 13. Capture all data from vertical programmes & other info systems (HR, Finance) in national data warehouse & feedback to district level
- 14. Design data "export" to Local Government Monitoring Database
- 15. Intensive follow-up in a single "test region" for system optimisation

16. Nation-wide system support (trouble-shooting, hardware maintenance / replacement, software maintenance, user support) in place

Medium Term¹

Deliverables:

- 1. DHIS refined, based on new registers & books implemented nationwide
- 2. Integration of related information systems (vertical programmes, HR, finance)
- 3. Data users at all levels competent in use of information for feedback, reporting, decision-making
- 4. Institutional impediments to HMIS sustainability solved

Tasks

- 1. Revised national indicator set agreed
- 2. Revised registers, forms, data flow designed for primary facilities & (non-specialist) hospitals
- 3. Facility-training (2 per facility) on new data tools & data flow
- 4. Continuous refinement & adaptation of DHIS software to meet user requirements
- 5. Conduct quarterly data use workshops with Districts and Hospitals
- 6. Conduct annual data use workshops with Facility in-charges
- 7. Assure effective information dissemination & feedback (all levels)
- 8. Integration with DHIS of information from related electronic systems
- 9. Assure fully functional national data warehouse including GIS

Institutional Environment: Conditions for Success

Short Term

- 1. Strong MOHSW leadership of entire HMIS Strategy
- 2. Project Financial Management & Implementation arrangement agreed
- 3. Guaranteed supply of registers & forms
- 4. National M&E Committee working, meeting regularly, overseeing HMIS development
- 5. MOHSW Project Co-ordinator assigned (100% of time)
- 6. Clear assignment of roles & responsibilities within HIR Section

Medium Term

- 7. National M&E Directorate established
- 8. MTEF for HMIS (central MOHSW, Regions, Districts)
- 9. New cadre & position gazetted at district, hospital, regional levels
- 10. HR requirements at central level identified & filled
- 11. Long term (computer) system support arrangements in place
- 12. Pre-service HMIS training course for integration into basic training
- 13. Specialist HMIS course for new cadre of DHMIS personnel

¹ Note: some of these "medium term" tasks (like dialogue to design new indicators & data forms) can be started earlier, to run in parallel during the first two years

- 14. System for funding, printing, ordering HMIS stationery in place
- 15. Mandatory use of health information & performance indicators in:
 - a. National annual report
 - b. District planning
 - c. District quarterly reports
 - d. Routine supervision visits
- 16. Absorption & alignment of vertical M&E systems
- 17. Data use culture established