

Achieving system interoperability through data harmonization: Work Group Feedback

PEPFAR (SA) HMIS Workshop
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Current status/state of affairs

- Significant amount of data exchange between providers in terms of individual arrangements in terms of what is exchanged and the format.
- Little or no dedicated infrastructure – largely bilateral arrangements between individuals in terms of what data is exchanged and the format.
- Work was begun on a data dictionary some time ago (David Bourne *et al*). More recently, a dictionary of atomic elements and aggregates/indicators developed by HISP as part of the DHIS project. Publically available.
- No real PEPFAR data dictionary – only the patient monitoring guideline

Area needs and objectives for further work

■ Need the following:

- National Data Dictionary;
- Recommended minimum data set
- Confirm the applicable standards for data interoperability and interchange
- Mechanism to transfer patient data
- Mechanism to transfer data across programs
- Mechanism to transfer data between clinical and laboratory, pharmacy etc

■ Objectives

- Confirm the applicable National Data Dictionary and develop mechanisms for consultation and review
- Extract a minimum data set satisfying requirements for clinical care, management and public health reporting
- Review and agree data and interoperability standards

Opportunities and available resources

■ Opportunities

- Leverage and possibly extend existing work on a National Data Dictionary and promote buy-in to National DOH initiatives
- Leverage existing work on a minimum data set
- Interface laboratory data

■ Available Resources

- Substantial existing skills and investment in systems
- Existing *ad hoc* data exchange

Next steps: 6-12 months

- Consider making the National Data Dictionary available on a dedicated accessible and set up a Wiki to lay the groundwork for consultation and agreement (HISP?). Initially could upload table headings and data element descriptions (approved CALISA deliverable to USAID?). Could be separate domains, eg HIV/ART.
- Create a formally chartered working group with members who have agreed to initial time commitments. Should be co-chaired by a representative of the national MOH.
- Have working groups to develop minimum data sets in the different domains.
- Ask parties to review the Patient Monitoring Guide (Transfer Patient Implementation Guide) and see how it maps to their own system.
- Recommend the creation of an indicator registry to include the name of each indicator, its description, and how it is calculated.
- PEPFAR provide funding of positions to support the common data dictionary and minimum data standards effort (Interoperability Working Group). Could be a student/intern at a research institution (university, MRC?)
- Interoperability specifications should make use of appropriate interchange standards such as HL7, IXF, etc
- Recognize the importance of paper but also provide some guidance in computerized systems and integration servers.

Next steps: 5 years

- Government should take over responsibility and ownership of the working group effort.
- Government to provide a road map for managing the migration from paper based systems to computer based.
- Find ways to disseminate appropriate tools to all parties.
- Set up a panel to test conformance to national standards, and to address the suitability of proposed data exchange solutions.

ADVERTISEMENT- HISA 2008

- Health Informatics in Africa conference (HISA 2008) [South African health Informatics Association]; incorporating the OpenMRS Implementers meeting
- 17-20 June 2008, Durban, South Africa
- 16 June, satellite meeting on mobile (PDA, cell phone) applications and data collection systems.