Implementers' Experiences: Experience in implementing HIE at the National Level - Tanzania Story

Session Name: Implementers' Experiences: Tanzania Story
OHIE18 Event Page - ohie.org/OHIE18
Time / Room: 8:30 - 9:30 Marquee
Presenter: Walter Ndesanjo - ICT Officer, Tanzania MoHCGDEC; Sultana Seif - ICT Officer, Tanzania MOHCGDEC
Etherpad Link: https://notes.ohie.org/2018-08-01_Implementers_Experiences_Tanzania

Notes:
Walter Ndesanjo:
System inventory - over 126 systems; many at the district level (some duplicative) - identified by 2016 (some siloed and/or across multple sectors)
Committment to HIE

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Peer to peer integration used first (e.g. HIS and MFR) - Without an interoperability layer
decided to use HIE- started March 2017
Phase I - HIE Project Organizational Structure (established PMO)

- Replace peer to peer integration and; do integration with hospitals (national referral hospitals)
  - three use cases (5 hospitals, aggregate data exchange, health facility registry,)[22]
- Tanzania HIE conceptual model build upon OpenHIE(use ESB model)

Sultana Seif:
Implementation Challenges

- lack of standards
  - custom service codes- using CPT codes
- some systems not enterprise ready
- coordinating stakeholders
- limited technical resources
- custom service codes- using CPT codes
- some temporary solutions to accomodate challenges

Sustainability Strategies:

- Implemented a three tier support structure, structured training and supporting tools and guides

Questions
Q - supporting tools and user guide - can they be used in other situations

- A. We have have several documents. One is the guideline for developing a facility registry. Also have the Health Sector Strategic Plan
- B. Address needs of the country

Q - Do we need an interoperability layer?

- A : It was important to have a flexible interoperability layer that could support different methods (FTP, CSV files, etc). This was critical because we could not replace all of the systems in place already. So we had to be able to interoperate with these systems in whatever way possible.

Q - What standards have you reviewed or selected?

- A (by Alpha Nsaghurwe, JSI): Use case 1 - service level data/ revenue-- ICD10/CPT (the challenge was that all hospital systems were using different codes); system flexible to support most standards ; (assume) terminology mediation occuring within the system

Q - What is the approach for systems that are not enterprise ready? (Replace, remediate?)

- A: The HIE will provide the means for those systems enterprise ready
- B. Data can be uploaded into the HIE from systems that aren't API ready (use file load; can export in CSV and/or Excel; receiver system receives the message based on the system design)

Q - What is the process for training users?

- A (by Alpha Nsaghurwe, JSI): We have trainer slides and participant workbooks for all the tools we are training on. These can be adopted and used by other countries.

Q - What is the system actually doing? Number of messages? What is actually being processed?

- A. system different for each use case; message sent to the mediator; each message with its own validation; sent to the receiver after mediation completed
- B. tracks errors/ message back to sender if/when errors occur

Q - tech and platform for the mediator

- A (by Michael Stelmach): Health-e-Link licensed to provide HIE services
- opensource model with Linux, Apache, MySQL, Java (but it sounds like the tool itself is proprietary, not open source, it requires a license, and it simply uses some open source tools)

Q - Can you talk about the HFR and how you got buy-in, who owns it and where the data goes.

- A: There was a discussion of whether the facility list should live in DHIS2 or in the HFR (health facility registry). It was decided that the source would be the HFR, and DHIS2 would be a destination.
- B. In Uganda, the HFR is owned by the MoH and updated by two people in each district

Q - internet connectivity

- A. using mobile network (coverage about 90%) up to district level. Group systems by their function like EMRs.

Melkiory, PORALG

- 28000 facilities
- have an EMR
- have a ??? gateway for sending data from one system to another
- Connecting with eLMIS

technology, processes, standards all have to be coordinated and involve different people. Therefore the implementation of even one use case is challenging. Operability is a key word.

- Next Steps: