TANZANIA DELEGATION – SWITZERLAND MISSION

DIGITAL HEALTH INTEROPERABILITY IN TANZANIA

AT SWIS TPH

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Introduction

- Health data system in Tanzania is categorized as semi-computerized where some health facilities are paper based, some use both paper/computer, and few ones are paperless

- Councils, regional and National levels are electronically and connected to the National ICT Broadband Infrastructure Fibre Optic Backbone (NICTBB)

- There are national initiatives to go paperless and for strengthening availability of quality health data

(2)
HMIS/DHIS2 System interoperability Initiatives

- Over 140 health programs/interventions report monthly/quarterly health facility data through DHIS2 using aggregate data except few programs which use case based data (DHIS2-tracker) such as TB, IDSR, Cause of Death (ICD)

- Tanzania has decided to set DHIS2 as a platform for health data analysis and reporting, it has some statistical package which can generate absolute number, Percent, Tables, Graph or geospatial map

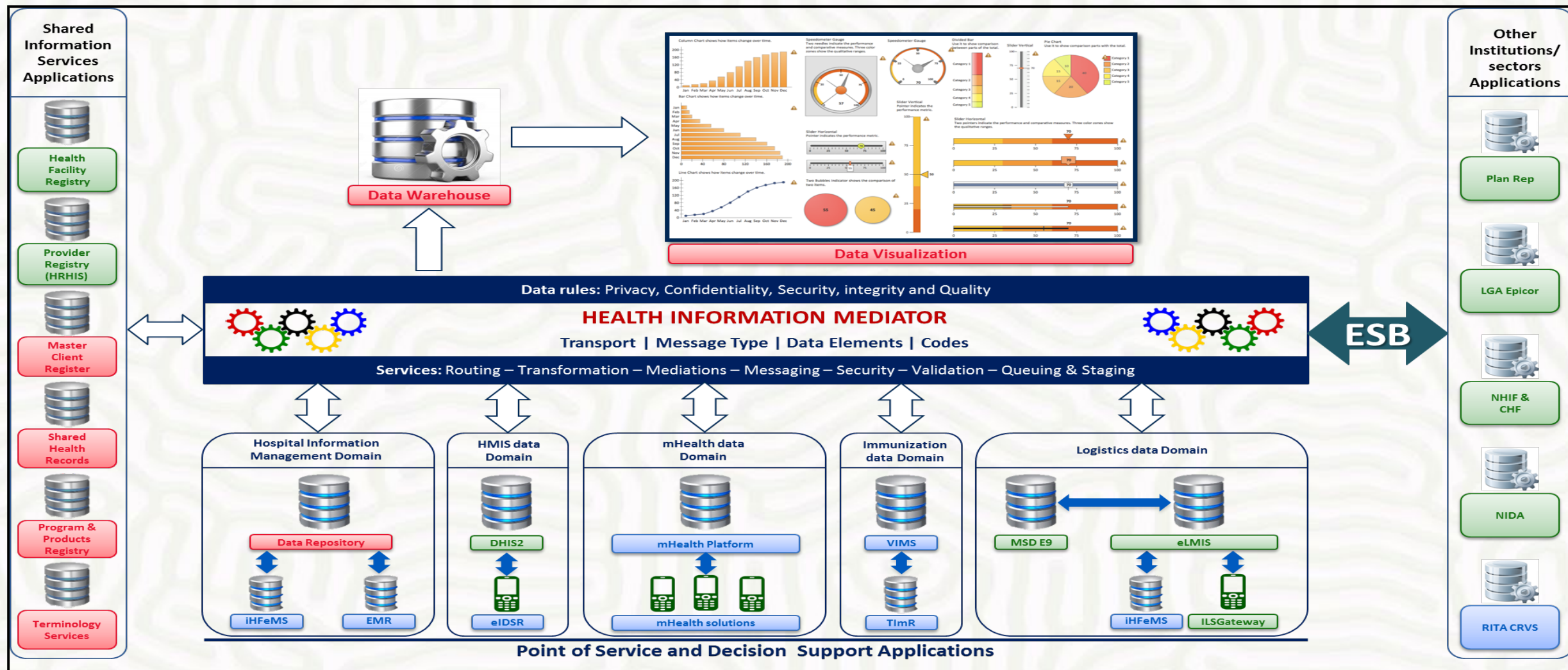- DHIS2 has capacity to mine data from eMR systems to generate reports

Health Information Mediator (HIM)

- Technically, it has been decided to integrate DHIS2 with eMR solutions through HIM interoperability instead of one to one integration

- HIM is the platform with interoperability layer that enable data exchange across multiple systems with various data formats and standards.

Tanzania Health Information Exchange conceptual model

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Current HIM Status

Health Information Mediator	
System Integrations Summary	
Total Systems	41
Total Internal Systems	33
Total External systems	8
Total Usecases	162

Achievements		
Category	**Coverage (Usecases)**	**%**
Total Gone Live	102	63
Total Integration Waiting Go live	25	15
Total Integrations Under Development	35	22

- More efforts still needed (Financial and Technical) to make HMI go live and accessible for data exchange

- Insufficient infrastructure "Server" that host HIM system due to high traffic of transaction.

- Incompatible of some eMR systems which are stand alone with no API to facilitate data sharing across systems.

- Need to develop Realtime HIM dashboard to visualize the status of all transactions if passed or failed for proper error follow-up that happen during sharing of data between systems (source and destination)

(3)
Electronic Medical Record (eMR) initiatives in Tanzania

Roadmap for Digital Health Initiatives

- Tanzania is implementing rollout of electronic Medical Record (eMR) in health facilities

- As of June 2022, about **31.9%** of public health facilities were implementing eMR solutions

- Implementation of eMR vary from one health facility to another some have one use case some multiple use-cases

- Commonly use-cases including financial (GePG, NHIF, PlanRep, FFARS), GoT-HOMIS, AfyaCare, CTC2, TIMR, eLMIS, LIS etc

- There is eHealth Strategy, Tanzania Digital Health Investment Roadmap to guide eMR solutions

Major eMR challenges and proposed solution

- Fragmentation of eMR solutions, there are over 100 solutions implemented in public and Non-public health facilities which are not connected to central data warehouse

- Higher cost to undergo facility paper less, it is estimated dispensary require at least **$4,713,** Health centre **$10,420** district hospital **$18,548** and regional hospital **$31,064**

- Client/patient unique identifier, the health sector is working with relevant authority including NIDA, RITA (Vital statistics Office), National Health Insurance Fund (NHIF)or any identification databases such as mobile companies, Banks etc to come up with unique national identifier

- Connectivity to health facilities is a challenge as many facilities are not connected to national ICT fibre optic cable

- Technology know how (technology is changing every day) need for engagement of stakeholders on development stage for appropriate solution and training to facility health staff to operate eMR solutions

(4)

Initiatives on Single National Digital System for Community Health

Introduction and Rationale

- Currently the Health Sector is emphasizing more on preventive than curative services through Community health services as holistic health care system

- Need for strong community health system has led to innovations of digital tools to reduce paperwork and enabling CHWs to deliver services that are guided.

- Government of Tanzania has decided to provide guidance, leadership and collaborate with partners to digitalize community health system

Unified Community System (UCS)

The govt under GF NFM3 support initiated community and facility health care providers (UCS) to enable services from community level to facility and vice versa

Applications

- Client Identification & Registration;
- Client Referral and Follow up;
- Decision Support and Work Planning;
- Routine health indicator reporting;
- Monitoring & Performance Management;
- Supply Chain Management.
- Linkage to health services,
- Follow up and tracing of miss appointment and lost to follow ups

OPENSRP

As of November 2022 more than 9 partners including PEPAFAR - COP has joined to support the system

HSSP V Vision ;

To have a healthy and prosperous society that contributes fully to the development of individuals and the nation.

United Republic of Tanzania

Ministry of Health, Community Development, Gender, Elderly and Children

Health Sector Strategic Plan
July 2021 – June 2026
(HSSP V)

Leaving No One Behind

Strategic Outcome; An interoperable ICT system in place, that meets international standards of communication, data storage and exchange of information, and that facilitates delivery of quality services to the population

Challenges, Mitigation and Solutions

- Inadequate resources for long-term support; we advocate to our funding partners for financial support

- Challenge in meeting different program and partner goals; we advise implementing partner to join hand the initiative

- Fast changing technology; we advocate stakeholders engagement