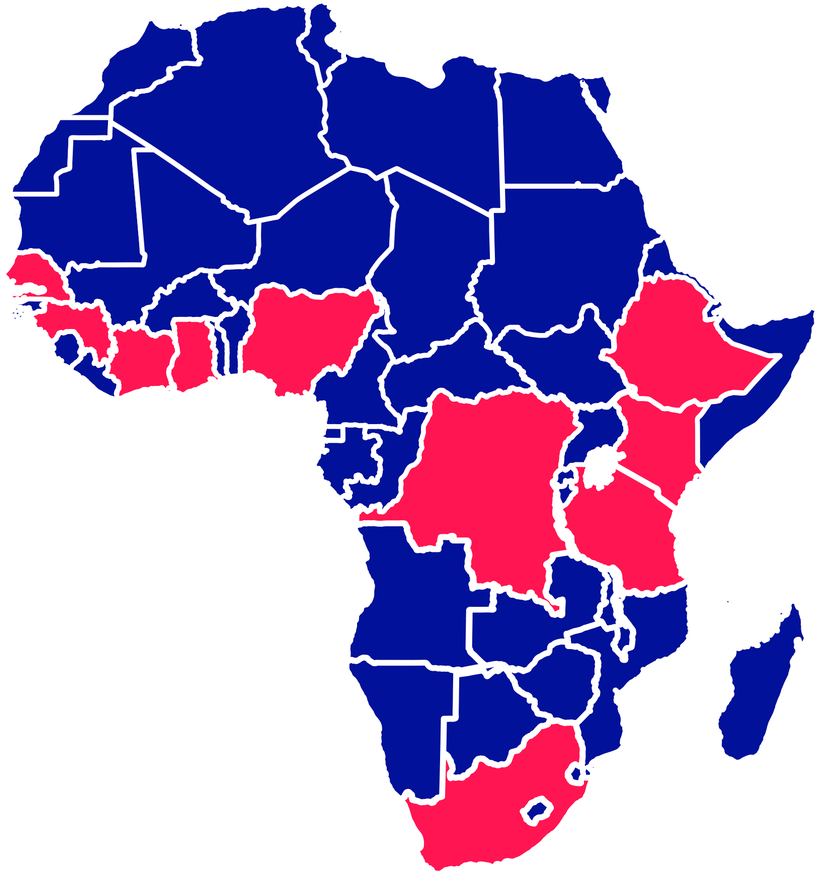
HEALTHTECH POLICY SUMMIT | 2025

HEALTHTECH HUB

ጤና ሚኒስቴር - ኢትዮጵያ
MINISTRY OF HEALTH - ETHIOPIA

Countries Represented- Welcome & Thank you!

1.Ethiopia
2.Kenya
3.Uganda
4.Ghana
5.South Africa
6.Zambia
7.Burkina Faso
8.Nigeria
9.Chad
10.Senegal
11.Cote d'Ivoire
12.Togo
13.Guinea
14.Tanzania
15.Rwanda
16.Malawi
17.Togo



HEALTHTECH HUB

IWG’s Journey 2022-2025

HealthTech Summit & IWG Evolution (2022-2025)

2022

- 1st edition
- Planted pan Africanism vision
- Catalyst- Covid-19 lessons
- Goal- conduct landscape analysis

2023

- Landscape analysis findings validated
- IWG conceived
- Catalyst- evidence from landscape
- Goal-develop a Policy Blueprint

2024

- Endorsement of Blueprint
- Launch of IWG
- Country self-assessment in 4 areas
- Goal- continuous policy review & capacity building
- Catalyst-Policy blueprint

2025

- Action oriented implementation- practical experiences, capacity strengthening building
- Catalyst- Change in funding landscape
- Goal- Strengthen regional collaboration

No IWG- foundation laid

IWG conceived for sustainability of policy dialogue

IWG active as implementation facilitator

IWG shapes summit agenda & priorities

NOVARTIS | The Novartis Foundation · THE GLOBAL FUND · Patrick J McGovern FOUNDATION · <norrsken> · Villgro africa · jhpiego · HEALTHTECH HUB

HEALTHTECH HUB

The Possibility of What Lies Ahead

Regional collaboration: Licensing

❖ Importance- ensures the safety and effectiveness of healthtech innovations-

❖ Challenge- current processes complex, unclear, lengthy, creates barriers to scale

❖ Policy recommendation- advance regional licensing harmonization withing existing bodies (AU, ACDC)

❖ Key actions:
- Pan-regional working group
- Compare and align licensing policies and standards regionally
- Build unified policy framework
- Digital platform for streamlined healthtech licensing

❖ Benefits:
- Consistent regulatory & licensing processes across countries
- Faster more efficient adoption and scaleup of innovations
- Reduced duplication of innovations

❖ Case studies
- IGAD Cross-Border Health Data Policy: Ethical, standardized data sharing for 8 East African countries, improving disease surveillance & emergency response

- African Medicines Agency(AMA): Pan-African agency for harmonizing medicine regulation and licensing, facilitating access to safe, quality medical products

.

THANK YOU

HEALTHTECH POLICY SUMMIT | 2025

Health Financing

HEALTHTECH HUB

ጤና ሚኒስቴር - ኢትዮጵያ
MINISTRY OF HEALTH - ETHIOPIA

Universal health coverage (UHC)

- UHC is a fundamental goal of many countries' health systems
- In 2019, world leaders committed to extend UHC to everyone by 2030
- Many countries have increased access to essential health services
- However, UHC remains elusive especially in low- and middle-income countries (LMICs)
- Innovative approaches are urgently needed to accelerate countries’ progress towards achieving UHC goals

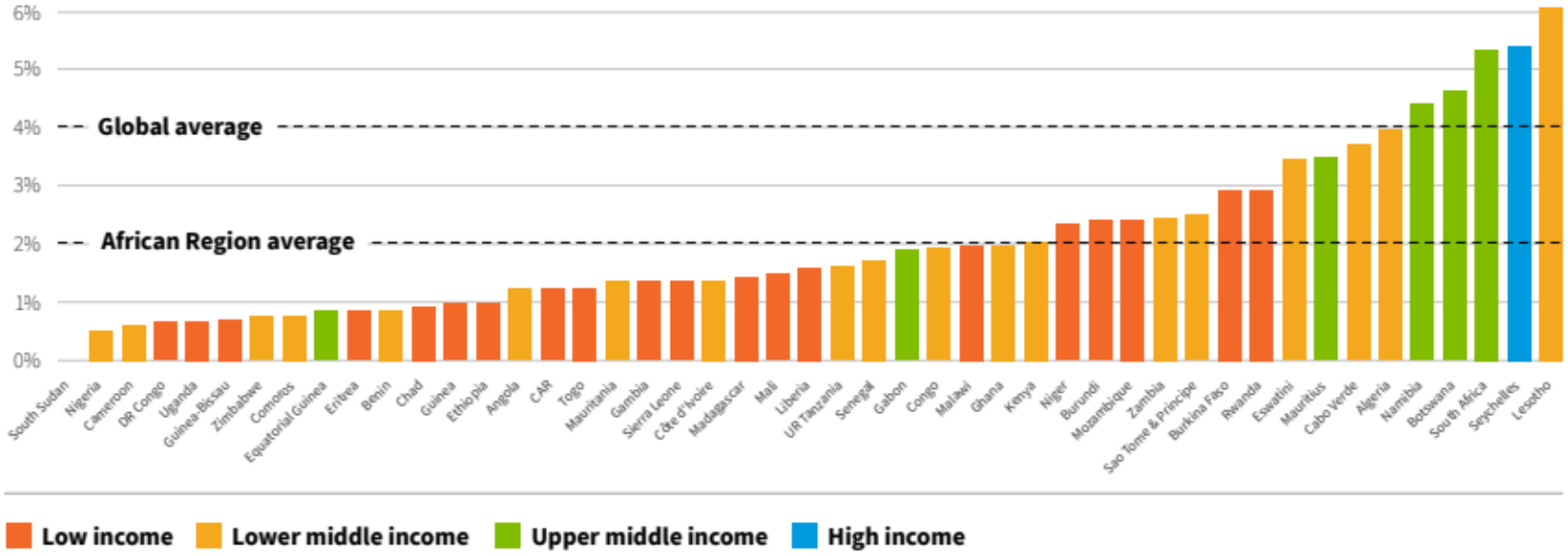
Digital health technologies can accelerate the achievement of UHC

- Increased access to health care services especially for those in hard-to-reach communities
- Rapid and efficient care, reducing the burden on health systems
- Improving the quality of health care services & strengthen patient-centered care
- Reduce the cost of health care services
- Empowering patients and providers and promoting health literacy
- Disease surveillance

Common sources of health financing

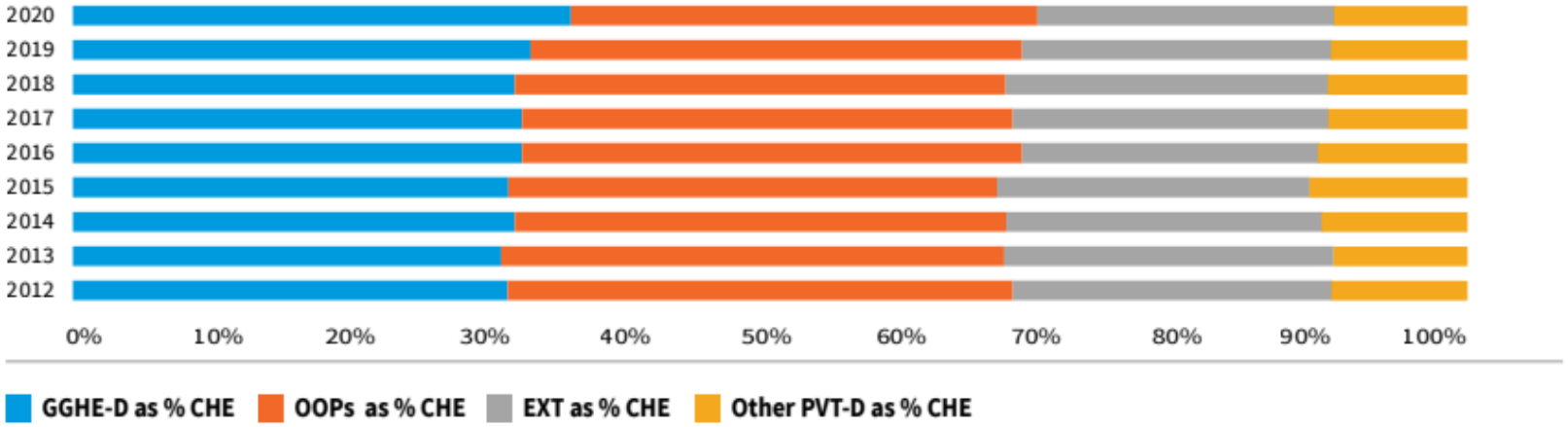
- Tax-based financing (government revenues)
- National or social health insurance
- Private insurance
- Community-based health insurance
- Out-of-Pocket expenditures
- External development assistance
- Innovative financing e.g., health taxes, diaspora bonds

Insufficient domestic investment in Africa's health sector



Domestic general government health expenditure as a percentage of gross domestic product, by country, 2020 [WHO African Region]

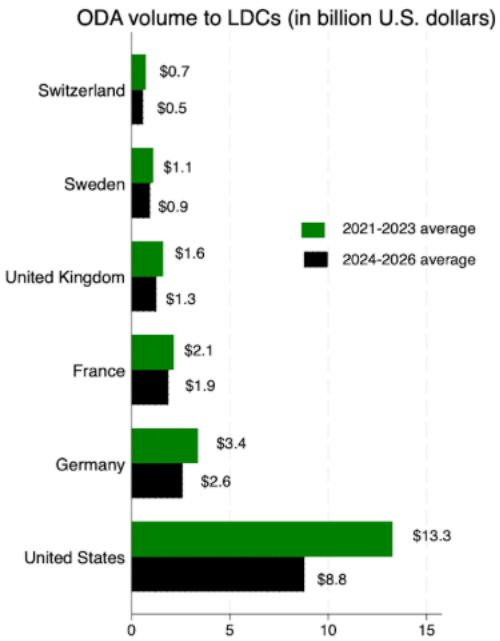
Limited private sector investment in healthcare in Africa

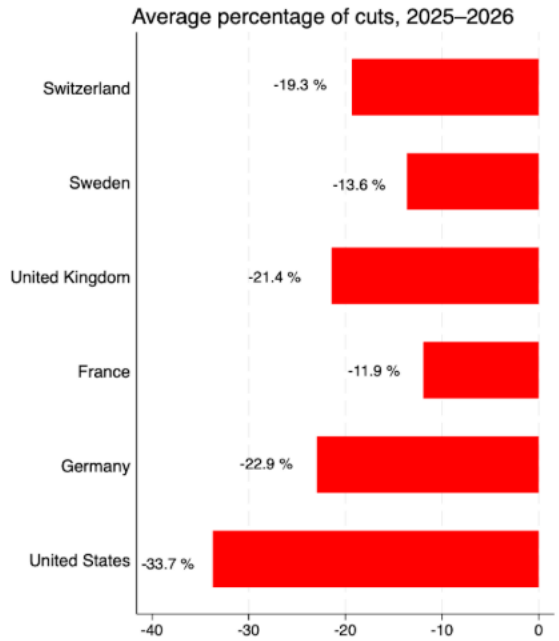


Current health expenditure by financing sources, 2012–2020 [WHO African Region]

CHE: Current health expenditure; GGHE-D: Domestic general government health expenditure; OOPs: Out of pocket health expenditure; EXT: External sources; PVT-D: Domestic private health expenditure

Significant decline in official development assistance (ODA) for the health sector in Africa





- Huge dependence on external donor funding - ~30% of total health expenditures in least developed countries (LDCs) [World Bank, 2023]
- Health is one of the top 5 sectors receiving the most ODA
- In 2023, the US & UK funded >50% of HIV, malaria and tuberculosis programs in Africa

Examples of use cases

- **Ethiopia**: Co-creation and co-financing of innovations
- **Egypt**: Investment in solutions developed by innovators
- **Rwanda:** Integration of health technologies through the National health intelligence center
- **Kenya**: Public-private sector partnerships to scale-up innovations
- **South Africa**: Government-led development of inter-operability framework

Summary & Policy implications

- Blended financing models - Leverage private sector through **public-private partnerships** (PPPs) to complement public sector efforts
- Increased **financial investment by the government** is pivotal - Integrating health more deliberately into national development and financing strategies
- Establishing **innovative domestic financing mechanisms** e.g. health insurance, health taxes, solidarity levies
- Improving **efficiency and accountability** in public health allocations and spending, through performance-based budgeting

THANK YOU

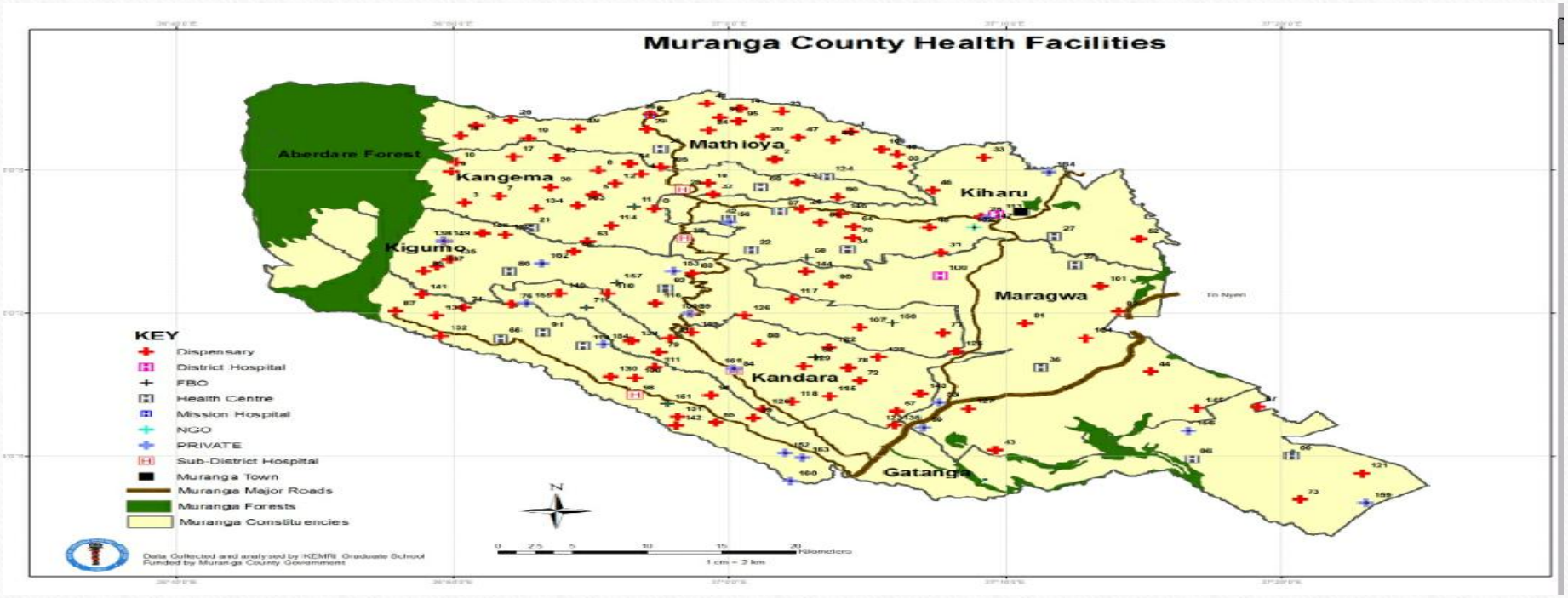
Automation ,Telemedicine & Mobile dialysis Journey in Murang'a County, Kenya

Transforming Healthcare Delivery for a Healthier future

Presenter: Salome Kimani

Assistant Director Nursing Services

Murang'a County Map & Health Facilities



Introduction: a vision for digitized Healthcare

- Mission: To create an efficient, transparent and patient- centric healthcare system in Murang'a County

- Goal: To leverage technology to improve the quality of care , enhance operational efficiency, and ensure equitable access to health services for all residents.

Key Pillars

- Automation of hospital processes to streamline operations
- Telemedicine to bring healthcare closer to the people
- Mobile dialysis (through hub and spoke model)

Why automation was necessary

- Financial leakages- difficulty in tracking revenue leading to loss
- Inefficient commodity management: poor inventory control
- Long patient waiting times: through manual registration
- Poor ward monitoring: inefficient tracking of patients progress and management

Automation journey

- It was phased and strategic process
- Began in 2022 with semi- automation of revenue collection in partnership with Safaricom
- Conducted Benchmarking to other counties
- Adopted ministry of Health 'Afya.KE' Health management system in may 2023
- Launched a pilot program and began phased implementation at Murang'a County Referral Hospital

Key Milestones in automation

- Abolished cash payment- introduced a USSD for M-pesa
- Developed Real- time data dashboards
- Replaced manual patients files with digitized patients records
- Equipping facilities with laptops and networks
- Comprehansive training

Impact of automation

- Increased revenue
- Reduced waiting time
- Enhanced accountability
- Improved decision making
- Seamless, faster referral to the next level of care

Introduction to Telemedicine

- Main aim is to enhance healthcare access through use of digital technology to provide remote medical consultations and care
- Why Telemedicine?
- To decongest our major hospitals
- To provide access to specialists for patients in remote areas
- Improve the management of chronic non- communicable diseases

Implementation of Telemedicine

- Pilot program: A pilot was launched in September 2024 initially targeting 36-44 health facilities- to run for 3 months
- County partnered with Byon8 which took care of 35 health facilities and HealthX which catered for 3 health facilities.
- Byon8 dropped off before the pilot was over due to some technical issues- this created room for the County to take the telemedicine services – in 33 sites

Implementation of Telemedicine

- HealthX wanted to continue with the services on commercial basis after 6 months pilot which was not sustainable.
- County took over the telemedicines services in all the 36 sites and we hired our own medical doctors and clinicians to run telemedicine from our own Hub.

Implementation of Telemedicine

- Patients visits their local health center or dispensary to have a virtue consultation with a specialist and to have their drugs refill
- A nominal consultation fee 100 is charged- affordability
- Mode of engagement: through the procurement plan anchored in the Murang'a County health services act of 2022 and Murang'a County health policy 2022- 2027

Benefits of Telemedicine

- Revolutionizing Healthcare through telemedicine
- Reduced travel time and costs- reduced distance of travel
- Continuity of care- easy for patients with chronic conditions to have regular follow- ups
- Timely medical interventions – through faster access to medical advice leading to better health outcomes

Technology Behind the Transformation

- Afya.KE HMIS- a system from the MOH
- Safaricom partnership- Leveraging M-pesa for secure and transparent revenue collection
- Investment in ICT infrastructure: modern computers and tablets equipped in the facilities
- Internet connectivity – reliable internet access through safaricom and starlink
- Reliable power supply – through KPLC and solarization of health facilities

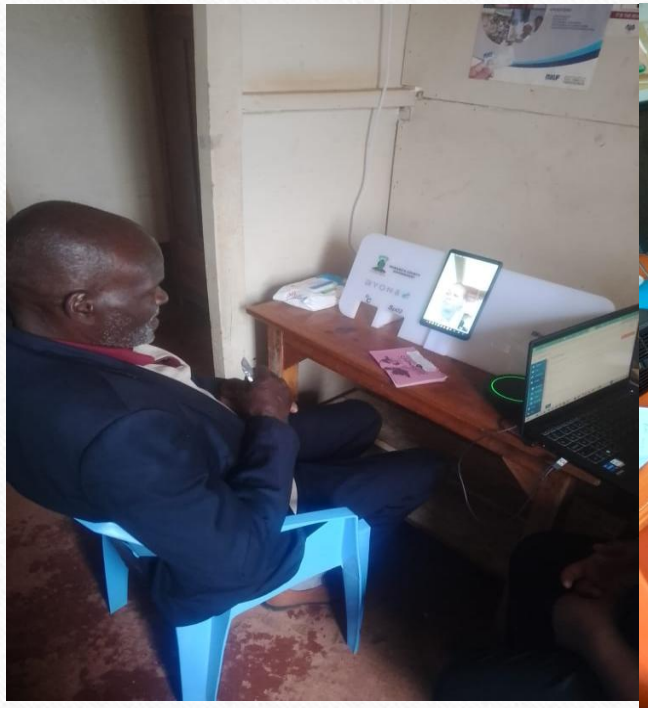
Challenges and lessons learnt

- Change management- resistance to change and new technology- this required continuous training and patience
- Infrastructure gaps- this is inclusive of reliable power and internet which is an ongoing process
- Data security and privacy
- Lesson learned – a phased implementation approach starting with a pilot is crucial for success

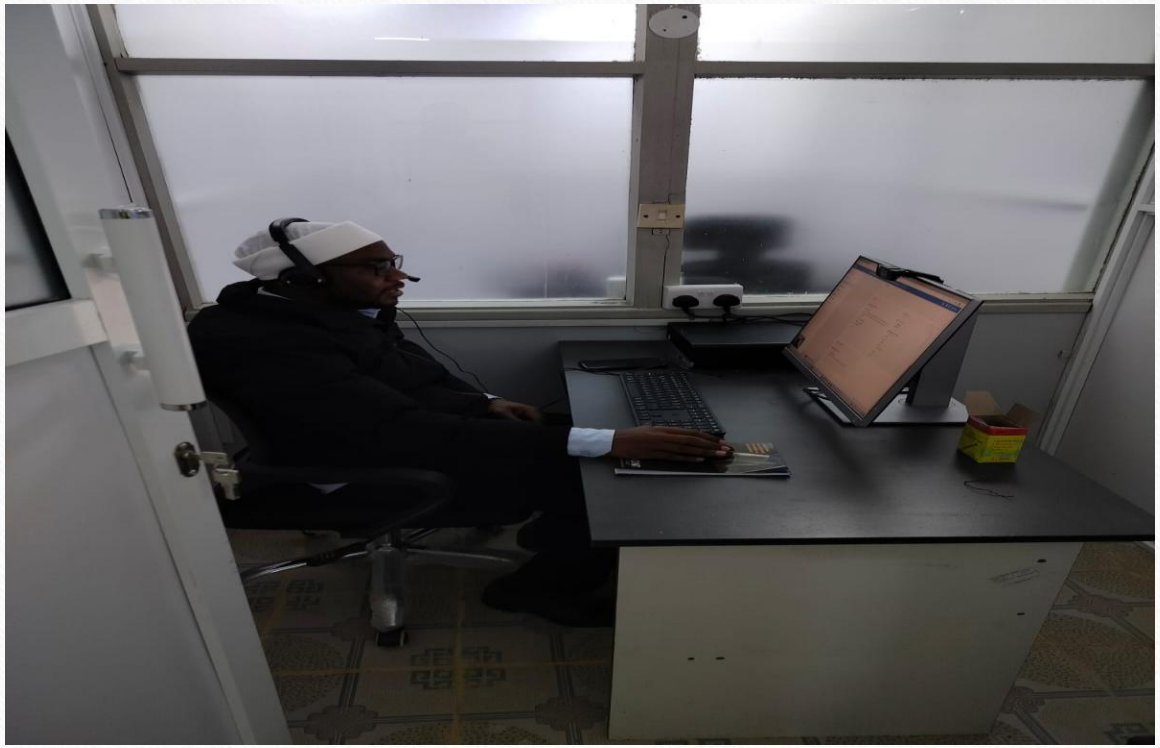
Future of Healthcare in Murang'a County

- Scaling up telemedicine to reach to many facilities and specialists services
- Integrating and adopting AI into data analytics to predict disease outbreaks, patterns and outcomes
- Continuous improvement through regular evaluation of the systems and processes to keep ablest with the evolving technology


MURANG'A COUNTY
TELEMEDICINE
Unit
FOR QUERIES CALL:
0757 562 988
"Your Health, Our Priority. Connecting You to Quality Care Anytime, Anywhere"




sir Kim | 2024.09.24 10:30



MOBILE RENAL DIALYSIS

- Introduction: The innovation was realized through a research study carried out by Benacare Ltd, Researchers in Jomo Kenyatta University of Agriculture and Technology (JKUAT) School of Nursing and Murang'a County Government back in 2022.
- The research was on difficulties faced by kidney disease patients while seeking services in the region.

Research findings

- It was found out that majority of the patients experienced challenges accessing renal dialysis services since the county had only 1GOK dialysis center and 2 private
- Geographically a large part of the county was out of reach of the services and clients had to seek services in Thika and Nairobi approx. 80 kilometers from Murang'a
- There was need to take services closer to the people

Hub And Spoke Dialysis Unit

- As an initiative to address the challenge of accessibility and affordability of the services, Benacare Ltd, an NGO involved in Homebased care established a brick and motor center at Kigumo Hospital which is serving as a hub in November 2024, while the mobile track serving as the spoke was launched on February 2025.
- They entered into a partnership with Murang'a County Government through an MOU and later through a procurement process whereby by they were prequalified and awarded the tender

Impact Of The Mobile Dialysis

- Services have been taken closer to the people- mobile track services 3 sub-counties
- Reduction in the cost of travel
- Clients use their SHA insurance for payment
- Healthcare personnel empowerment especially the Community Health Promoters (CHPs) to enhance prevention through early detection and improving health seeking behavior

MPACT OF THE MOBILE DIALYSIS

- Opening doors for public- private partnership (PPP) – which is being hailed as a significant step forward in making health care more accessible and equitable

Mobile Dialysis Unit

Mobile unit on the Road

CHP Training

- THANK YOU
- Q & A

HELINA

Pan African Health Informatics Association

Standards & Interoperability & Healthcare Digital Transformation

Healthtech Summit

Standards & Interoperability: Drivers of Healthcare Digital Transformation Toward Standards-Based Digital Health Ecosystems

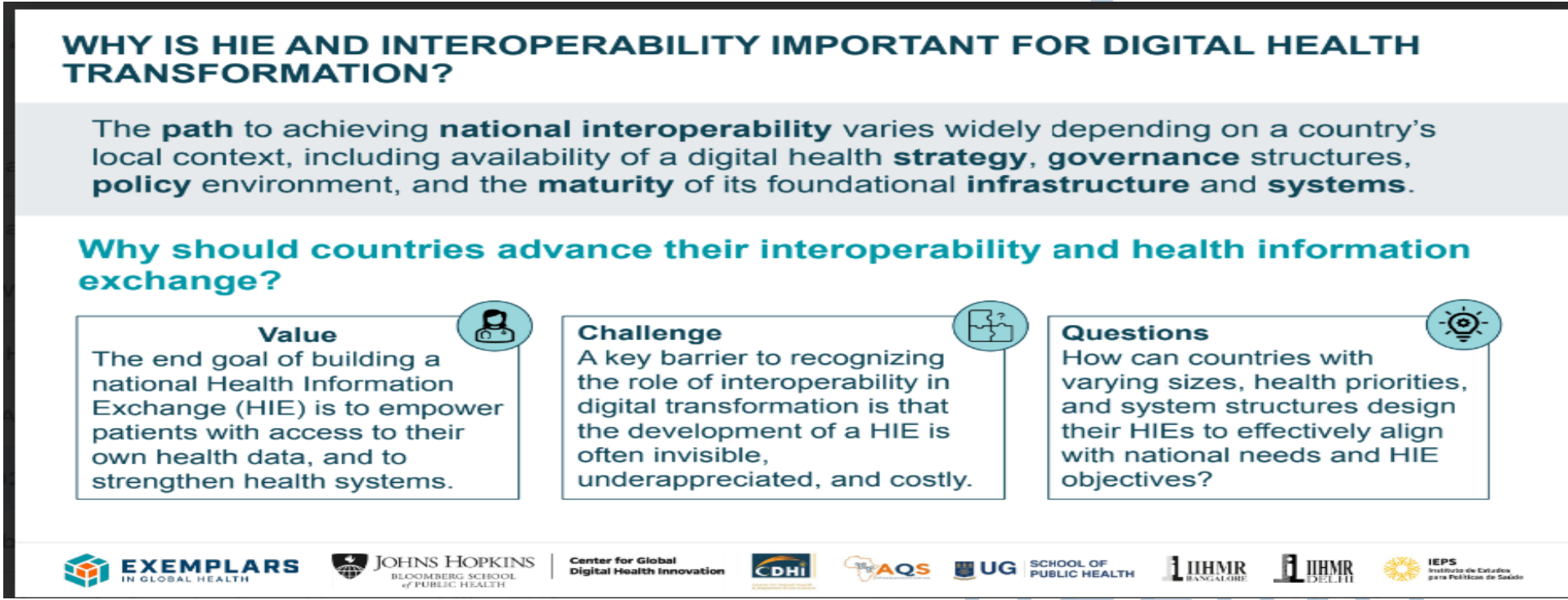
HELINA |Healthtech Summit | 12th-13th Aug, 2025

Presenter(s): Dr. Kamau Mwangi

Outline

- **Introduction**
- **Digital Health Standards & Interoperability Assessment – Africa**
- **Nigeria Case Study Review-Proposed practical guide**
- **AfricaCDC Continental Digital Health Flagships**
  - **Governance & Policy {HDG framework & DTS Models}**
  - **National HDG Development**
  - ***Standards & Interoperability {SIL-Africa}***

Introduction *(Digital Health Exemplars)*



- Maturity level based on GDHM across the 7 enabling environment elements

Countries S&I Assessment Report

- **Objectives**
  - **Assess adoption of digital health standards across African countries**
  - **Evaluate interoperability frameworks and governance structures**
  - **Identify gaps and support needs**
  - **Recommend strategic actions for HELINA and partners**

- **Countries Responses 20% (11/55)**
  - **Chad, Zambia, Kenya, South Africa, Nigeria, Zimbabwe, Uganda, Togo, Burkina Faso, Senegal, Guinea**

  - **Sample: 11 country responses across Africa (mix of low- and middle-income settings)**

  - **Regional representation: Eastern Africa (2/14); Western Africa (5/15); Central Africa (1/9); Southern Africa (3/10) & Northern Africa (0/7)**

Countries S&I Assessment Report

Executive Summary

- ***Big picture****:* Most countries report **low or partial interoperability**, with several countries *in progress* on adopting global interoperability frameworks and standards. Commonly-cited framework and standards include **OpenHIE, HL7 FHIR, ICD-11, SNOMED, HL7** respectively.

- ***Main barriers***: **human resource & capacity gaps**, **technical/infrastructure constraints**, **limited financing**, and **fragmented governance**.

- What ***HELINA & partners can do***: focused **technical assistance** (pilots + reference architecture), **capacity-building** (hands-on training), **policy/governance support** (regulatory frameworks + compliance pathways), and **practical toolkits for phased adoption**.

Countries S&I Assessment Report

Desired Support from HELINA

- **Capacity Building:** Training, technical guidance, and skill development.
- **Use Case Sharing:** Learning from other countries' success stories.

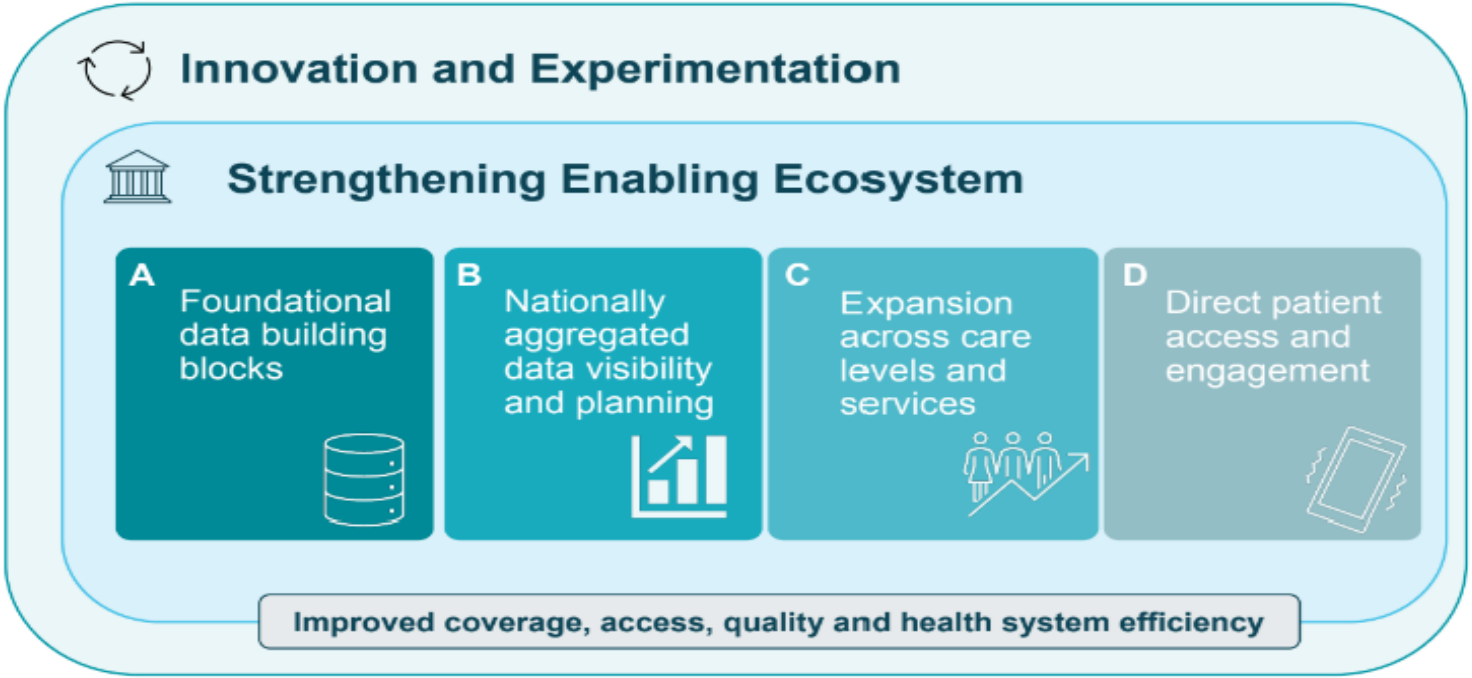
- **Funding and Resources:** Financial support for system upgrades and integration.
- **Standards Guidance:** Help in localizing global interoperability standards.
- **Innovation Facilitation:** Encouraging adoption of new digital health tools and predictive analytics.

- **Summary**
  - The dataset reveals a **wide spectrum of digital health interoperability maturity**—from countries with advanced adoption of HL7 FHIR to those just beginning their journey. Common threads include:
  - **Low interoperability maturity** across public-private boundaries.
  - **Strong interest in global frameworks**, but with varying implementation stages.
  - **Significant human and technical capacity gaps**.
  - A clear need for **capacity building, standard localization, and governance support**.

DIGITAL HEALTH EXEMPLARS

Theme 1 | Stages of interoperability and building a HIE

The journey to interoperability and building an HIE often begins with foundational elements—such as health IDs and registries—with the goal of enabling direct patient access to their health information.



Case Study: Nigerian HER/EMR Standard Development Review

Selected key learning points from the Nigerian HER/EMR Standards & Interoperability Development Process

HELINA

Pan African Health Informatics Association

Practical Approach to National DH Standardization & Interoperability

Practical step-by-step **procedural + methodological roadmap** any country can follow to develop digital health standards, enable interoperability, and set up effective governance.

{Interactive Session with Participants Developing the draft Standard & Interoperability Document: Structure/Phases will be provided and participants to populates the respective activities/task in plenary session}

Assess → Design → Pilot → Scale → Sustain

1. Group Work Template

1. *Sample Approach to National Standardization & Interoperability Document + Sample gantt Chart*
2. *Sample Policy Brief to Relevant Ministers (MoH, ICT,Finance & Legal/Internal??)*

Continental Healthcare Digital Transformation

- **Critical drivers :**
  - **Appropriate Governance Mechanism**
  - **Standards & Interoperability**
- **AfricaCDC highlights the two as flagship initiatives* for DT**
  - **Jointly working to develop key drivers of continental digital transformation in healthcare.**

1) ***Governance & Policy initiatives (Model HDG & DTS)-*AfricaCDC & HELINA***
2) ***National Health Data Governance-HELINA & Transform Health***
3) ***Standards & Interoperability Lab for Africa (SIL-Africa)- HELINA & HTHA***

SIL-Africa Overview

- Launched Oct 2024, Kigali in partnership with HealthTech Hub Africa (HTHA)
- A flagship of Africa CDC's Digital Transformation Strategy
- Mission: Enhance **interoperability**, **compliance**, and **innovation** in digital health
- Built on the **4 T's**:
  - **Teaming** – Building the COIL network for collaboration
  - **Tooling** – Developing technical toolkits and sandboxes
  - **Testing** – Running compliance and conformance validation
  - **Training** – Capacity building via workshops, connectathons, mentorship

Why a Standards & Interoperability Lab

- **The Problem**
  - Fragmentation of digital health solutions in Africa
  - Siloed systems, non-standard data flows, poor scalability
- **The Need for a SIL-A**
  - A **safe, controlled environment** for governments, startups, and implementers
  - Evaluate **compliance** with HL7 FHIR, OpenHIE Spec, and WHO SMART guidelines
  - Align innovation with **national digital health strategies**
  - Foster **cross-border interoperability testing**
- **HELINA & SIL-Africa Goals**
  - Operationalize Africa CDC's **Flagship initiative**
  - Support Ministries of Health in **solution evaluation** and **governance**
  - Promote innovation through **Health Tech startups CapDev** on interoperable solutions
  - Leverage tools like the **OpenHIE Test Harness Tool (THT)** for conformance testing

HELINA & HTHA's SIL-Africa Vision

- A **scalable testing ecosystem** anchored in African needs
    - ***Hub & Spoke setup {Countries can start using the Hub as they progressively setup local spoke }***
    - ***Sufficiently global (Hub) and precisely local (Spoke)***
    - ***Appropriately aligned for country readiness to participation in GDHCN***
- **Partnerships** with WHO, Ministries of Health, Health Tech startup/scale-up
- **Enable innovators** to validate tools early, build trust with governments
- Contribute to global best practices on **sIL governance and test methodologies**
- Position SIL-Africa as a **continental node** in a global interoperability network

HELINA & Partners Targeted Response

- ***Technical assistance & pilots***
  - Short-term technical advisory to design/validate a national reference architecture (OpenHIE + FHIR mapping) and an MPI/identity plan.
  - Seed/grant support for 1–2 interoperable pilots (public+private + primary care integration) that demonstrate end-to-end data exchange.
- ***Capacity building***
  - Hands-on, role-based training: interoperability architects, implementers, data stewards, and regulators. Include practical lab exercises (install/configure OpenHIE components; build a FHIR API end-point; map SNOMED/ICD).
  - Mentorship/coaching for national technical teams over 6–12 months (DHALP) + Africa on FHIR.
  - HELINA?HTHA-Startups Cohorts
- ***Governance & policy support***
  - AfricaCDC model HDG framework & Model DTS to fast track adoption process with countries
  - Templates for national interoperability policy, compliance and certification procedures, and procurement language to require standard-compliant systems.
  - Guidance for regulatory bodies: roles, KPIs, enforcement mechanisms, and public–private coordination models.
- ***Toolkits & community of practice***
  - SIL-Africa Hub & spoke: architecture associated resources, implementation checklists, data mapping templates, and test suites.
  - Establish active regional community of practice (Regular clinics, shared code repos, interoperability test network).
- ***Funding & partnership brokering***
  - Help countries prepare pilot proposals, identify funders, and support public–private mechanisms to finance scale-up.

Thank you

HELINA

Pan African Health Informatics Association

HEALTHTECH POLICY SUMMIT | 2025

HEALTHTECH HUB

ጤና ሚኒስቴር - ኢትዮጵያ
MINISTRY OF HEALTH - ETHIOPIA

HEALTHTECH HUB

#HealthTechPolicySummit2025

Experiences in Kenya building public-private partnerships: what makes a healthtech solution scalable and adoptable?

Ayub Manya (M.B. Ch. B, MSC (applied Epidemiology), PhD)

Director of Health Financing, Digital Health, Policy and Research
Ministry of Health, Kenya

Introduction

- Advanced Technology has a significant impact on health systems globally, regionally, and nationally
- To enhance healthcare, technology offers many options, ranging from revamping current processes to adopting new ones (innovations)
- Innovations solve identified challenges through innovation hubs, incubators, hackathons, and relevant technical working groups
- This brings the concept of the socio-technical approach –the importance of understanding social behaviour in adopting and scaling innovations
- Using empirical data from Kenya, we adopt the participatory design approach to understand the implementation of innovations

Participatory design approach: How to make design locally relevant and owned

- Innovative ideas may come from field work, the public and academia
- Important for innovators to understand local situations and involve users
- In some cases, core developers/innovators are distanced from reality, leading to an increasing role of "implementers" for mediating requirements
- In addition, Innovators should collaborate with key government institutions, such as universities, to establish credibility
- While some innovations receive support from donors or implementing partners, there is hardly any funding for implementation

Adoption of innovations

- Social actors in an organisation use power to shape how innovations are managed and used
- It is crucial to understand the dynamic organisational processes, knowledge about the intentions of actors and features of the technology
- Adoption requires an understanding of Sustainability– institutions/ users taking ownership
- Scaling involves breadth – expansion, technology transfer/ technological learning
- All these require adequate funding
- Understanding funding models such as private-public partnerships is important for the adoption and scaling of innovations

Kenyan Context for Private Public Partnerships in HealthTech

- Policy & Regulatory Environment: Kenya Health Policy (2014–2030), Digital Health Act 2023, The PPP Act 2021, Data Protection Act 2019
- Market Drivers: Mobile penetration (over 60% smartphone use), M-PESA integration for payments
- Examples of PPP: Currently government is implementing a comprehensive health information system. A private consortium consisting of Safaricom and others is developing, while getting paid by users
- Away from health, we have a superhighway to the airport funded by a private company. Users of the road pay through tolls
- There are several subnational governments' collaborations with NGOs and startups

Lessons Learned from Kenya's PPP Experience

- Clear alignment of incentives – government focuses on access and equity; private sector focuses on innovation and efficiency
- Trust-building mechanisms – governance agreements, transparent procurement, open dialogue
- Sustainability planning – transition from donor funding to revenue models
- Capacity building – using local workers through a participatory approach
- PPPs are not just about funding; they are about shared vision, aligned incentives, and sustainable models

THANK YOU

Health Tech Policy Evidence Generation

A Guide for African Health Tech Providers

Africa's Health Tech Ecosystem: Opportunities & Constraints

Structural Challenges

- **Projected deficit of 6.1 million skilled health workers by 2030.**
- Generational analyses of current health workforce shows young workforce
- Chronic underfunding; most countries fail to meet 15% Abuja target for healthcare allocation.
- Over 60% of the African population lacks access to essential healthcare services.

Demographic & Economic Transformation

- **Africa's population projected to double by 2050, median age under 25.**
- **Widespread mobile phone penetration (over 650 million Africans).**
  - Smartphone penetration expected to reach 75% by 2026(for Ghana - 113% in 2024)
  - Internet penetration in Ghana 70%
  - Catalyzed a vibrant health tech sector focused on telemedicine, home health, and supply chain management.

- Digital tools shown to mitigate geographical and resource barriers.

The Policy-Market Paradox: Fragmentation & Opportunity

- **Significant Challenge: Regulatory Fragmentation**
  - **"Patchwork of digital health regulations" across countries**
  - Inconsistencies lead to increased costs, confusion, and potential legal bottlenecks.
  - Patents and IP laws nonexistent or not enforced

Strategic Opportunity: Co-creation of New Frameworks

- Where regulatory structures are absent or outdated, a chance exists for **innovators to partner with governments.**
- Positioning innovators as partners in building a more favorable environment.

Investment Climate: Shifting to Patient Capital

- **Historical Underfunding**
  - Health technology historically underfunded compared to FinTech.
  - Perception of healthcare as a purely social sector with long payback periods
  - Heavy reliance on shrinking international aid and donor funding.

- **Crucial Shift Underway**
  - African healthcare market projected at **over $259 billion by 2030.**
  - Value generated by data in digital health projected to be billions of dollars.
  - **Return on investment in health technology must be viewed through a long-term lens.**
  - Healthcare is a **foundational pillar of economic development**.
  - Argument for **"patient capital"** aligning commercial viability with development goals.
  - Exploring innovative financing models

Strategic Pillars of Policy Influence: From "Influence" to "Informing"

Fundamental Mindset Shift

- From trying to "influence" policy to systematically "informing" it.
- Positions provider as a trusted, objective partner supplying clear, high-quality, unbiased evidence for decision-making.
- Essential for establishing trust and mutual respect.

Building Credibility & Collaboration

- Incorporate research in your innovation and Involve policymakers throughout the **entire research cycle**
- Ensures research relevance to national health strategic plans.
- Approach health problems with willingness to accept negative findings.
- Fosters a partnership where both parties provide critical guidance for effective research utilization.
- what are you bringing to the table?.

Generating Policy-Relevant Evidence: M&E Framework

Foundation: Robust, Policy-Oriented Monitoring and Evaluation (M&E) Framework

- Must be designed at the outset of any digital health intervention.
- Goes beyond simple program metrics to capture data directly relevant to policymakers' concerns.
- Focus on **scalability and sustainability.**
- Key components: clear goals, mix of process and outcome indicators, data collection methods, reporting plan.

Strategic Value of the Framework

- **Aligns M&E goals with a country's national health priorities**
- Demonstrates from the outset that a solution addresses a government's existing concerns.

Generating Policy-Relevant Evidence: The Three Pillars

Policymakers require a holistic view for complex trade-offs.

1. Clinical Evidence

- Foundational proof of technology's **efficacy and safety.**
- Includes data on improved health outcomes, reduced medical errors, enhanced patient engagement.

2. Economic Evidence

- Crucial for securing funding and demonstrating **favorable ROI.**
- Data on cost-effectiveness, efficiency gains, optimized resource use.
- Counters perception of health as a purely social sector.

3. Social and Behavioral Evidence

- Addresses impact on **social determinants of health (SDOH), equity, and user adoption.**
- **Highly persuasive data:** improved access for vulnerable populations, reduced health disparities, increased digital literacy.

Generating Policy-Relevant Evidence: The Technological Toolkit

- **Leveraging the Digital Nature of Health Tech for High-Quality, Real-Time Evidence**

- **Big Data and Artificial Intelligence (AI)**
  - Analyzes large volumes of health data to identify patterns, predict outcomes, and forecast trends.
  - Allows for **real-time monitoring** and data-driven decisions.
  - Reduces burden on human resources by automating analysis.

- **mHealth Platforms**
  - Provide a direct, continuous link between patients and healthcare providers.
  - Facilitate **real-time data collection and engagement.**
  - Offers valuable insights into intervention effectiveness and challenges.

- **Interactive Digital Dashboards**
  - Consolidate various data streams into user-friendly platforms.
  - Enhance visualization and interpretation of M&E data.
  - Promote transparency and accountability, giving policymakers access to up-to-date information.

Translating Evidence into Action: Packaging & Engagement

Packaging Evidence for Policymakers: The Art of the Brief

- Policymakers are time-constrained; need easily digestible, actionable information.
- **Key best practice: Package research findings into short, simple summaries**
- **"Evidence briefs for policy"** are highly effective: user-friendly, key messages, clear problem/options/implementation descriptions.
- **Goal: To inform, not persuade.** Present objective evidence and a range of options.
- Enhances legitimacy of decision-making and fosters trust.

Best Practices for Stakeholder Engagement: Building Trust

- **Fundamental to successful policy engagement: Openness, mutual respect, understanding needs.**
- Leverage credibility of **local senior researchers, scientists, youth, and community leaders.**
- Identify and engage with policymakers at the **right levels of authority** (district, national, regional, global).

Translating Evidence into Action: Regulatory Sandboxes

- **Forward-looking and Powerful Tool**
  - **Controlled environment for innovators to test new products and services.**
  - Allows **direct collaboration with regulators.**

- **Addresses Key Mismatches**
  - **Speed of innovation vs. pace of regulation** (e.g., AI's rapid iteration vs. slow RCTs).
  - Regulators may lack technical expertise to oversee new technologies effectively.

- **Benefits for Innovation and Policy Co-creation**
  - Allows companies to test solutions and **accelerate time-to-market.**
  - Gives regulators a safe, supervised environment to learn.
  - Data and lessons learned directly inform **new, modern, and risk-aware policies**.
  - Fosters **"bidirectional education"** between innovators and regulators.
  - Creates a more predictable and favorable market environment.

Strategic Recommendations for Health Tech Providers

- **Prioritize Policy-Oriented M&E**
  - Embed a robust M&E framework from project inception.
  - Focus on **clinical, economic, and social indicators** directly aligning with national health strategies.
  - Ensures data is compelling and relevant to policymakers.

- **Engage with Purpose**
  - **Shift mindset from "influencing" to actively "informing" policy.**
  - Build long-term, trusting relationships with policymakers.
  - Leverage credibility of local researchers and community leaders.

- **Embrace Partnerships**
  - Actively seek **Public-Private Partnerships (PPPs)** and engage with accelerators/innovation hubs.
  - De-risk technology, **co-create policy, and secure sustainable funding.**
  - Participate in platforms like regulatory sandboxes to gain insights and contribute to new frameworks.

Strategic Recommendations for Policymakers & Governments

- **Foster Dialogue**
  - Establish formal platforms, such as **regulatory sandboxes,** for continuous, constructive dialogue.
  - Creates an environment where regulators can learn from innovators and develop new policies in a risk-aware manner.

- **Harmonize Regulations**
  - Create a harmonized regulatory environment for health data and licensing.
  - **Will enable cross-border scaling, reduce legal bottlenecks, and attract more private investment.**

- **Invest in Digital Infrastructure**
  - **Prioritize and commit to long-term investment in reliable power, internet connectivity, and digital literacy.**
  - These foundational elements are essential for health tech innovations to reach all citizens, especially in underserved communities.

Strategic Recommendations for Investors & Development Partners

Shift to Patient Capital

- Move away from short-term grants and donor funding.
- **Embrace a long-term investment perspective**, recognizing health tech's ROI is tied to broader societal and economic development.

- **Support Policy-Oriented Initiatives**
  - Actively fund and support initiatives like the **HealthTech Hub Africa**
  - These programs create a more favorable and harmonized policy environment, de-risking investments and lowering market entry costs.

- **Bridge the Funding Gap**
  - Promote and explore **blended financing models** that combine development finance, impact funds, and private capital.
  - Provide a continuum of funding for startups from seed stage to scale.

Thank You

HEALTHTECH POLICY SUMMIT – Masterclass 3: Evidence Generation for Policy Influence and Investment Readiness

Policy Decisions in South Africa; How to Align Data with Ministry Priorities – Through the Lens of National Health Insurance (NHI)

Ms Milani Wolmarans, Chief Director Digital Health Systems

Ministry of Health South Africa

13 August 2025

Framing Question

As South Africa prepares for implementation of National Health Insurance (NHI), how do we ensure our data becomes indispensable in shaping decisions that matter?

health
Department:
Health
REPUBLIC OF SOUTH AFRICA

NHI Policy Decision-Making Landscape

Political leadership:

- Minister and Deputy Minister of Health
- National Health Council – 9 Provincial Political Heads of Health
  - technical committees

Administrative Leadership

- ***DG and NDoH EXCO (Head of Branches)***
- ***NHI Branch***
  - ***Chief Directorate Digital Health***
- ***Provincial health departments***
- Department of planning monitoring and evaluation
- Presidency – Digital Transformation unit
- Treasury - for funding decisions
- Department of Public Service and Administration
- Department of Communication and Digital Technology

Guiding frameworks:

- National Development Plan
- Medium Term Strategic Framework
- National Health Act (Section Health Information Governed by section 74 and 75)
- NHI Act - (Section 40)
- Presidential Compact for Health – Pillar 9
- Annual Performance Plans

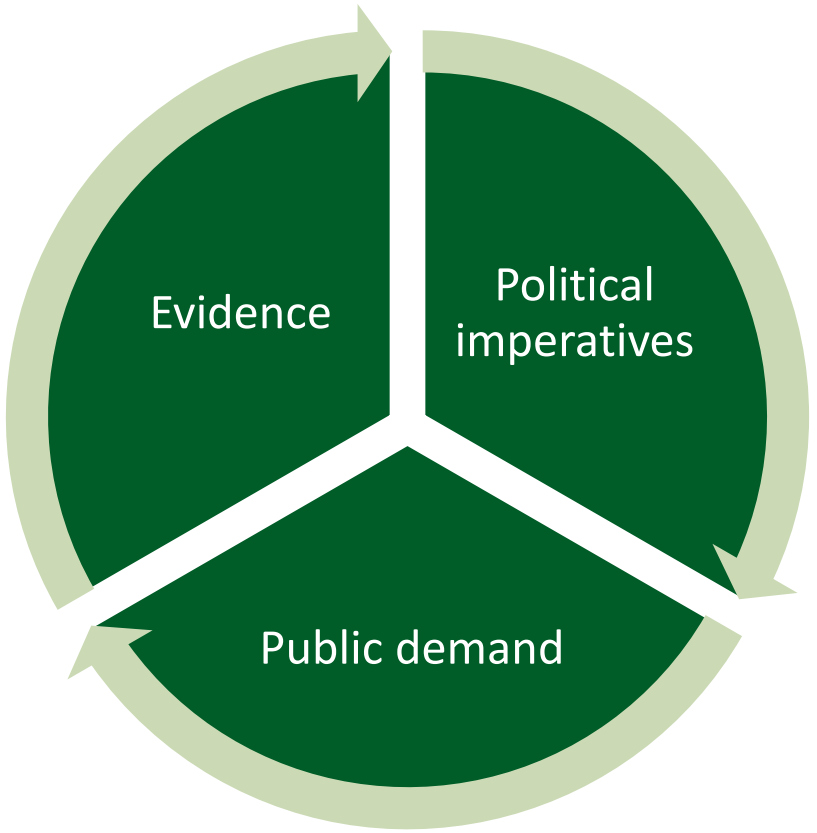
Generic

52 pieces of regulations and guidelines that impact on Digital Health

health
Department:
Health
REPUBLIC OF SOUTH AFRICA

NHI Policy Decision-Making Landscape

Decision making culture – create a balance between…



health
Department:
Health
REPUBLIC OF SOUTH AFRICA

The big picture

National Health Information System Requires Data and Information to solve

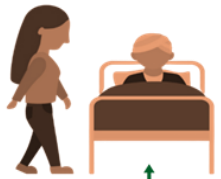
WHO received services – **WHERE** - from **WHOM** - for **WHAT** - at what **COST**

At ALL times!

Healthcare Encounters

National Health Insurance Bill
ISBN 978-1-4850-0609-1
Section 40

01 USER (WHO)



Information from Health Patient Registration System (HPRS)

02 FACILITY (WHERE)

Information from Master Health Facility List (MHFL)

03 CLINICAL PROVIDER (WHOM)

Information from Provider Registry (PR)

04 HEALTH SERVICE (WHAT)

EMR: Clinical Diagnostic and Procedural Coding. ICD 11, (ICHI) and (ICF)

05 COST (HOW MUCH)

National Department of Health Benefits (NHI Fund)

National Health Information

National Health Insurance Digital Platform

health

Department:
Health
REPUBLIC OF SOUTH AFRICA

Evidence that matters

Epidemiological & surveillance data	• burden of disease, mortality, and incidence trends
Service delivery data	• coverage, quality, efficiency indicators (from DHIS, surveys)
Economic and cost-effectiveness evidence	• budget impact models, resource allocation trade-offs
Equity-focused evidence	• disaggregated data highlighting inequalities in access and outcomes
Implementation feasibility data	• operational readiness, infrastructure capacity, HRH availability
Policy evaluation findings	• what has worked or failed previously

Department:
Health
REPUBLIC OF SOUTH AFRICA

Characteristics of Policy-Influencing Evidence

- Timely
- Aligned with Ministerial or strategic priorities
- Actionable and easy to interpret format
- Connected to measurable NHI milestones

Aligning Data with Ministry NHI Priorities

Map data to priority frameworks

- Match your indicators to **MTSF outcomes**, **Ministerial priorities**, and **APP targets**

Embed evidence in policy cycles

- Provide input during **planning and budgeting phases**, not just after implementation

Speak the language of policy-makers

- Translate technical outputs into policy implications ("If we do X, we will reduce maternal mortality by Y% within Z years")

Leverage strategic opportunities

- National Health Council meetings, parliamentary briefings, budget reviews, and Cabinet memos

Collaborate with champions

- Partner with senior officials and programme managers who can advocate for your evidence

Use multiple data formats

- Combine data products for quick reference, briefs for decision-makers, and detailed reports for technical teams

health
Department:
Health
REPUBLIC OF SOUTH AFRICA

Tips and Pitfalls

Tips:

- Frame in terms of service quality, equity, cost-effectiveness
- Use disaggregated data to show equity gaps
- Highlight cost implications and trade-offs

Pitfalls:

- Overloading with technical detail
- Providing data that is outdated or misaligned with current priorities
- Ignoring implementation realities
- Unrealistic expectations

health
Department:
Health
REPUBLIC OF SOUTH AFRICA

Call to Action

NHI will transform the health sector in South Africa

- Audit datasets for NHI relevance
- Engage early in the cycle
- Make decisions easier with your evidence

health
Department:
Health
REPUBLIC OF SOUTH AFRICA

Conclusion

Evidence** that builds the NHI — **one decision at a time

*The **winning evidence** is the one that's ready before the question is asked*

Published Book: *The Emerging South African National Health Information System – Download from*

https://www.health.gov.za/nhi-resources/

health
Department:
Health
REPUBLIC OF SOUTH AFRICA

Tanzania's experience in setting up national digital health systems : compliance means in practice for startups, and common gaps that exist.

HEALTH TECH POLICY SUMMIT 2025

Presenter: Sosthenes Bagumhe

USAID
FROM THE AMERICAN PEOPLE

Presentation Roadmap

- Identifying the Need
- Implementation Decision and Approach
- Implementation and Training Strategies
- Future Use of the System & Sustainability
- Achievement for Country support to Startups
- Award winners in Tanzania

Identifying the Need

Addressing immediate need

USAID
FROM THE AMERICAN PEOPLE

Background

- Fragmented ICT pilots and numerous HIS silos
- Inadequate sharing/exchange of information across the sector
- Fragmented and uncoordinated business processes
- No common investment framework
- Emphasis on governance and partner coordination
- Need for a holistic approach

GoT HIE Commitment

Health Sector Strategic Plan 2021 – 2026

- Stimulate use of digital solutions & guide interoperability of systems

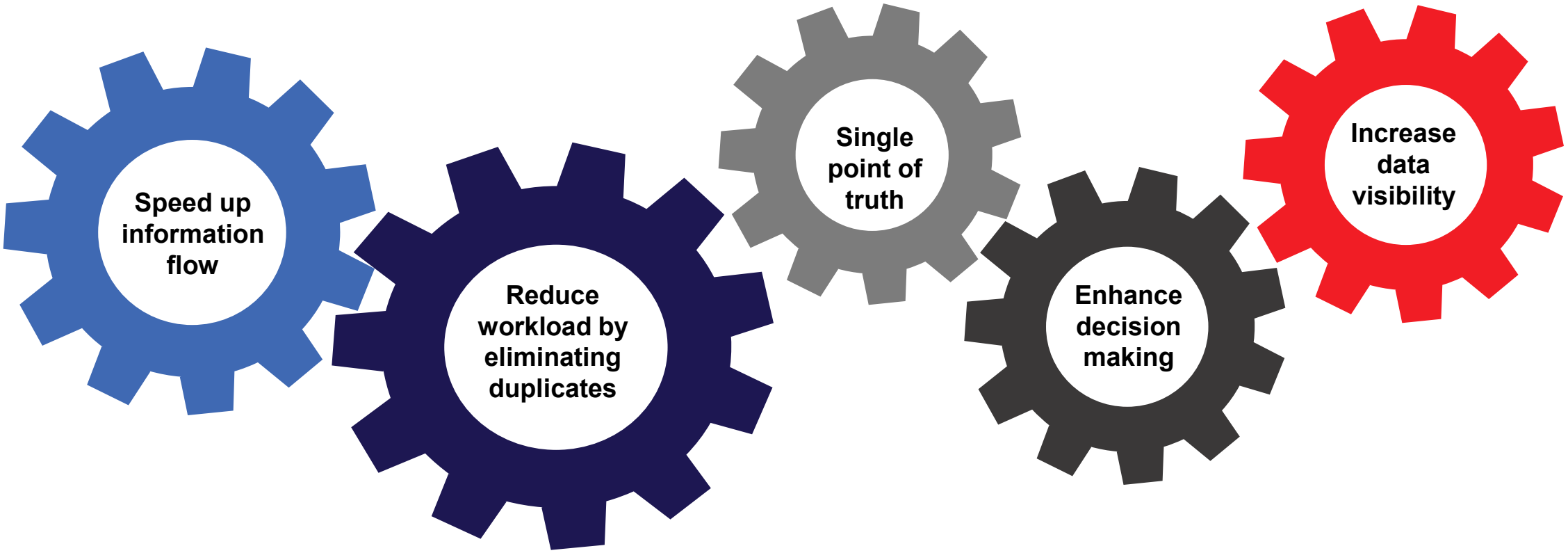
National Digital Health Strategy 2019 – 2024

- Establish standards, rules, and protocols to facilitate information exchange

Establishment of Digital Health Governance Structure

- National Digital Health Steering Committee

Why HIS interoperability?



Tanzania HIE Implementation

The HIM Implementation **started March 2017**

Focus:

- Replacement of **Point-to-Point integration** of Legacy systems

- Real time hospital data from **5** selected National and Specialized Hospitals **(MNH, MOI, JKCI, Mbeya ZRH, Kibong'oto IDH)**

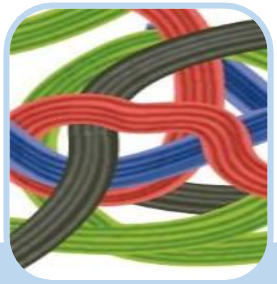
Implementation Decision and Approach

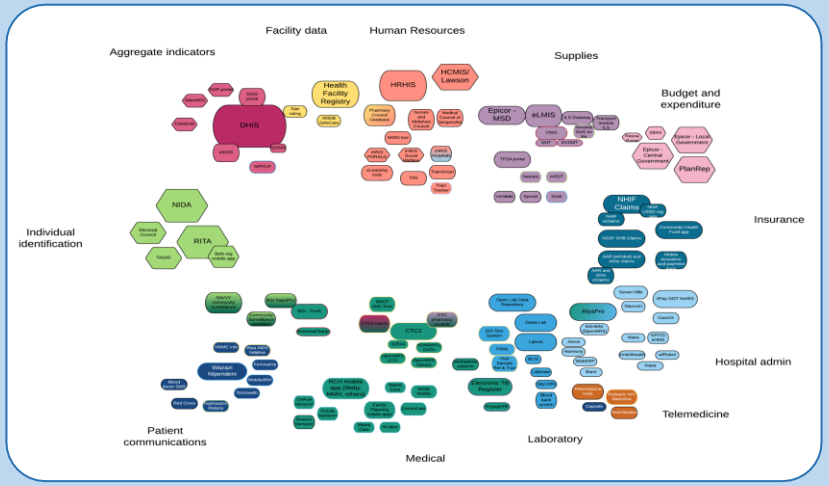
Design to scale

USAID
FROM THE AMERICAN PEOPLE

Tanzania Health Information System Integration Evolution

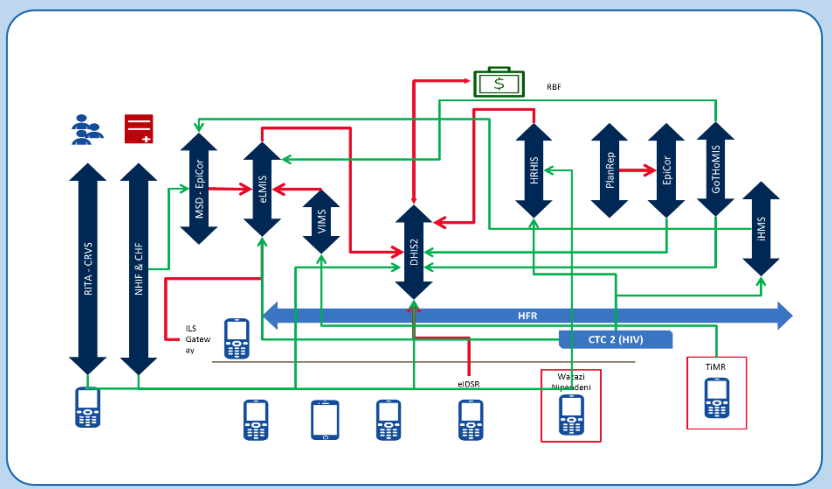
Ad Hoc





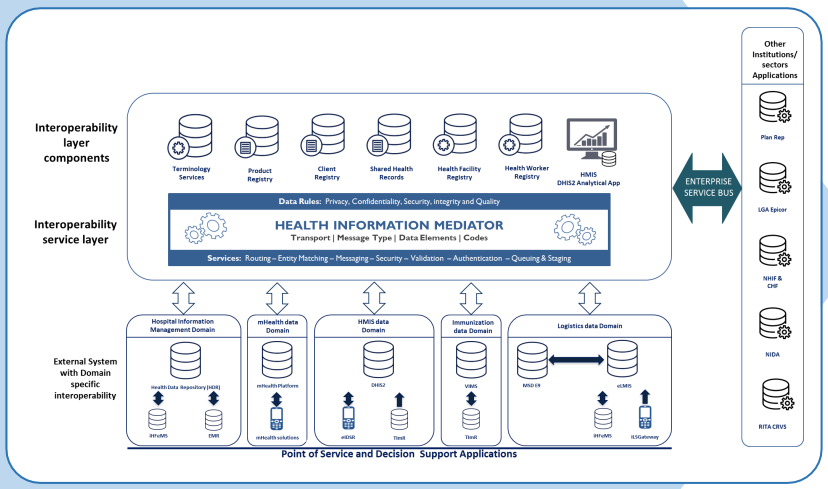
- Multiplicity of systems (128+)
- Business/ program specific system silos
- No standards, redundancy, gaps
- Limited scale and no governance

Organized



- Some nationally scaled systems (DHIS2, eLMIS, VIMS, HRHIS, HFR etc)
- Limited peer-to-peer interoperability
- Key architectural gaps
- Limited governance (system specific)

Integrated



- Enterprise Architecture (21+ Systems)
- Common standards and guidelines
- Formal governance (eHealth SC)
- Linked with other eGov systems (Muungano Gateway)

USAID FROM THE AMERICAN PEOPLE

Maternal and Child Survival Program

Tanzania Health Information Exchange (TzHIE)

Integrated

nteroperability layer components

nteroperability service layer

External System with Domain specific interoperability

Terminology Services

Product Registry

Client Registry

Shared Health Records

Health Facility Registry

Health Worker Registry

HMIS DHIS2 Analytical App

Data Rules: Privacy, Confidentiality, Security, integrity and Quality

HEALTH INFORMATION MEDIATOR

Transport | Message Type | Data Elements | Codes

Services: Routing – Entity Matching – Messaging – Security – Validation – Authentication – Queuing & Staging

ENTERPRISE SERVICE BUS

Hospital Information Management Domain

Health Data Repository (HDR)

iHFeMS

EMR

mHealth data Domain

mHealth Platform

mHealth solutions

HMIS data Domain

DHIS2

eIDSR

TImR

Immunization data Domain

VIMS

TImR

Logistics data Domain

MSD E9

eLMIS

iHFeMS

ILSGateway

Other Institution sectors Applicatic

Plan Rep

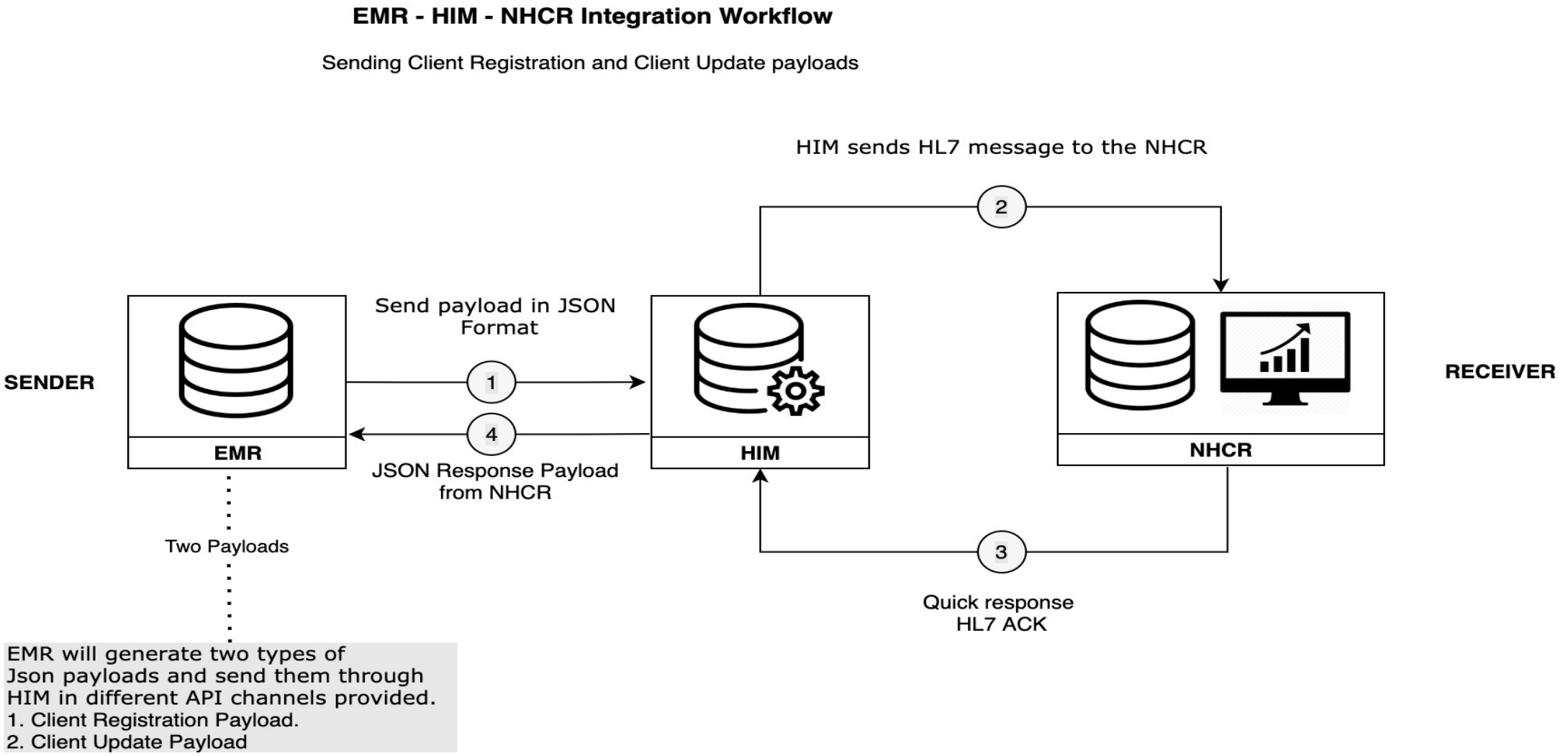
LGA Epicor

NHIF & CHF

NIDA

RITA CRVS

HIM: Standard conversion

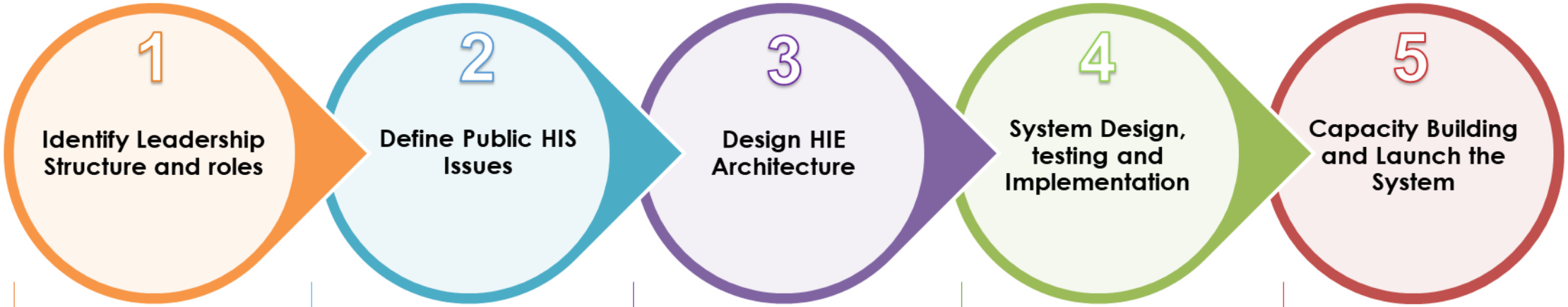


Implementation and Training Strategies

Building local capacity

USAID
FROM THE AMERICAN PEOPLE

Tanzania HIE Implementation Approach



- Governance requirements
- Coordination
- Financing of the HIE

- Identify all HIS issues
- Develop requirements
- Develop SRS for HIE
- Prioritize SRS for HIE

- Identify HIS for HIE
- Design HIE Architecture framework
- Interoperability needs and Data Standards
- Install test and production Instance

- Develop Use Cases
- Define msg type, transport method
- Configure use cases
- Implement and test HIE

- Develop manual and User guide
- Train Admins, Operational staff and users
- Launch the use cases
- System support and Data use

Use case Implementation Approach

1	2	3	4	5	6
					
Identify & Prioritize Use case	**Develop Use Case Requirement**	**Configure the System**	**Test the System**	**Launch/Go Live**	**Training and Support**
Meet with SME and agree on high priority use cases to be configured	Design and develop use case specifications	Configure as per specifications	Conduct end to end testing and resolve all issues	Deploy the use case in production instances	Training of: • Administrators • Data Submitters • End users

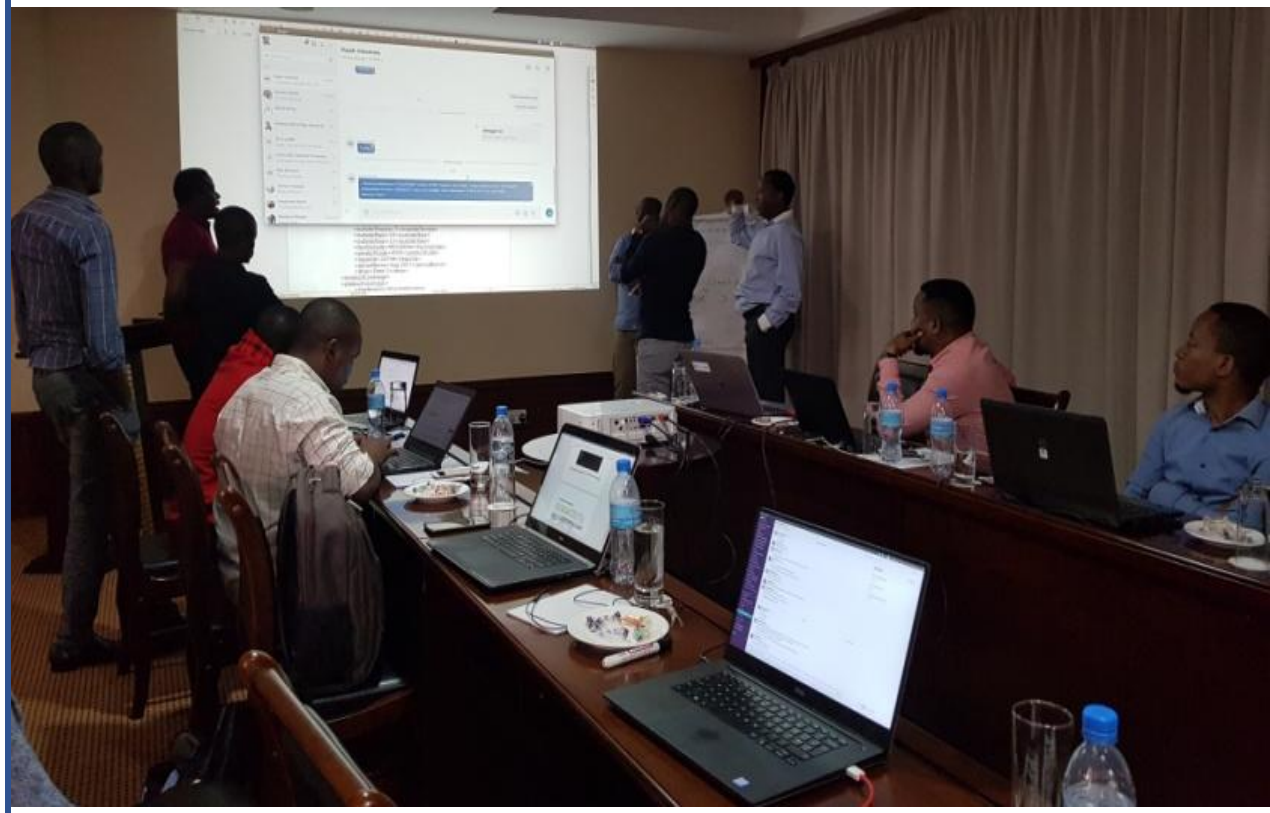
Phase 01 Use Cases (14 systems are integrated)

Use Case #01: Client level data exchange for hospitals

a. Tracking medical services received
b. Tracking deaths by disease case
c. Tracking bed occupancy rate
d. Tracking hospital revenue

Use case #02: Aggregate data exchange to DHIS2 through HIM

a. **eLMIS:** Count of stock received, consumed, stock on hand at facility level
b. **Immunization data (VIMS):** Monthly Counts of children vaccinated
c. **E9:** Count of stock received, consumed (distributed), SOH at MSD
d. **HRHIS:** Number of HCW for each cadre (MDs, Nurses, etc) by gender and employer



Training Strategy

IMPLEMENTERS AND ADMINISTRATORS

DATA SUBMITTERS

HOSPITAL MANAGEMENT

MOH MANAGEMENT

Implementation Challenges

- Lack of data standards – all hospitals with different custom **service** and **product** codes
- Some systems not being enterprise ready
- Coordinating multiple stakeholders
- Limited technical resources

Future Use of the System & Sustainability

Design for scale and sustainability

USAID
FROM THE AMERICAN PEOPLE

Current Implementations

- Integration of National Health Client Registry (NHCR) with Afyacare system and other EMRs through the Health Information Mediator (HIM)
- Integration of Tertially Hospital systems with DHIS2 through the HIM
- **Integration of (Out of stock notification, between eLMIS, Epicor 10 at MSD and GOTHOMIS**
- **Integration of Financial allocation between FFARS, eLMIS and MSD Epicor 10.**
- **R&R Integration between GoTHOMIS , ELMIS and MSD Epicor 10**

Opportunities: Future Uses of the System

- Increase the ability to triangulate and compare data across domains/tiers/functions
- Enhance the premise of collecting data once and using it multiple times
- Facilitate continuity of care across programs/facilities/health needs
- Improve decision-making at the time of care

Sustainability Strategies

- Structured training methodology catered for different user groups
- Easy to use supporting tools & system operationalization and administration guides
- Availability of system testing/training and development environments for continuous capacity building

Achievement for Country support to Startups

- Tanzania organized 3 types of innovation awards this year:-

a) Afya AI - Health Tech

b) Career na Mimi – EdTech

c) PonaHealth - Health Tech

- The first winner was awarded 1500 USD, the second winner was given 1000 USD, and the third winner was given 500 USD.

Modality of Award evaluation

- The 1st Cohort was ICTC: we gave room for innovators to submit their innovations physically or online, then Judges evaluated them.

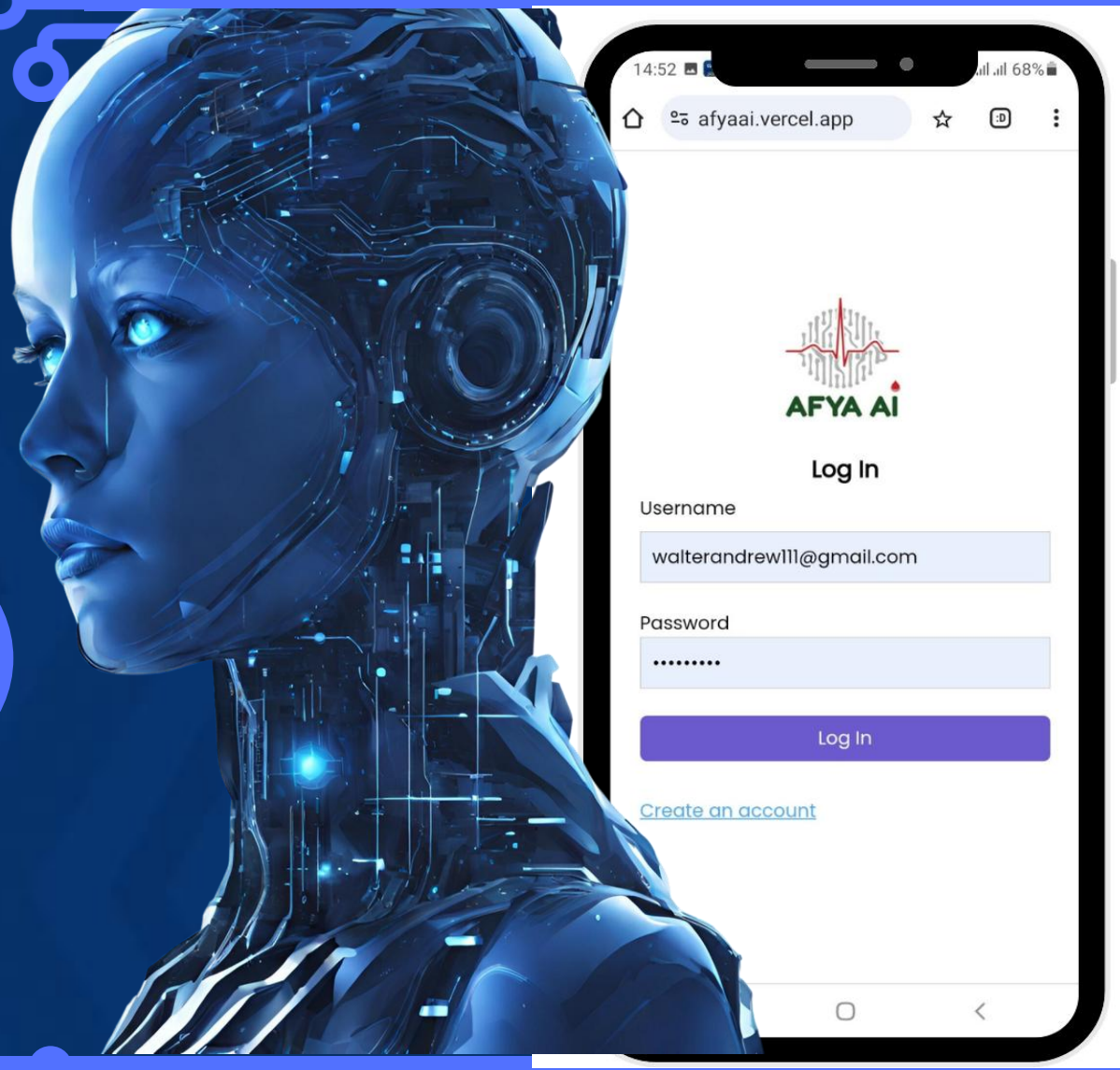
- The second level we selected few innovations which were subjected to pitching.

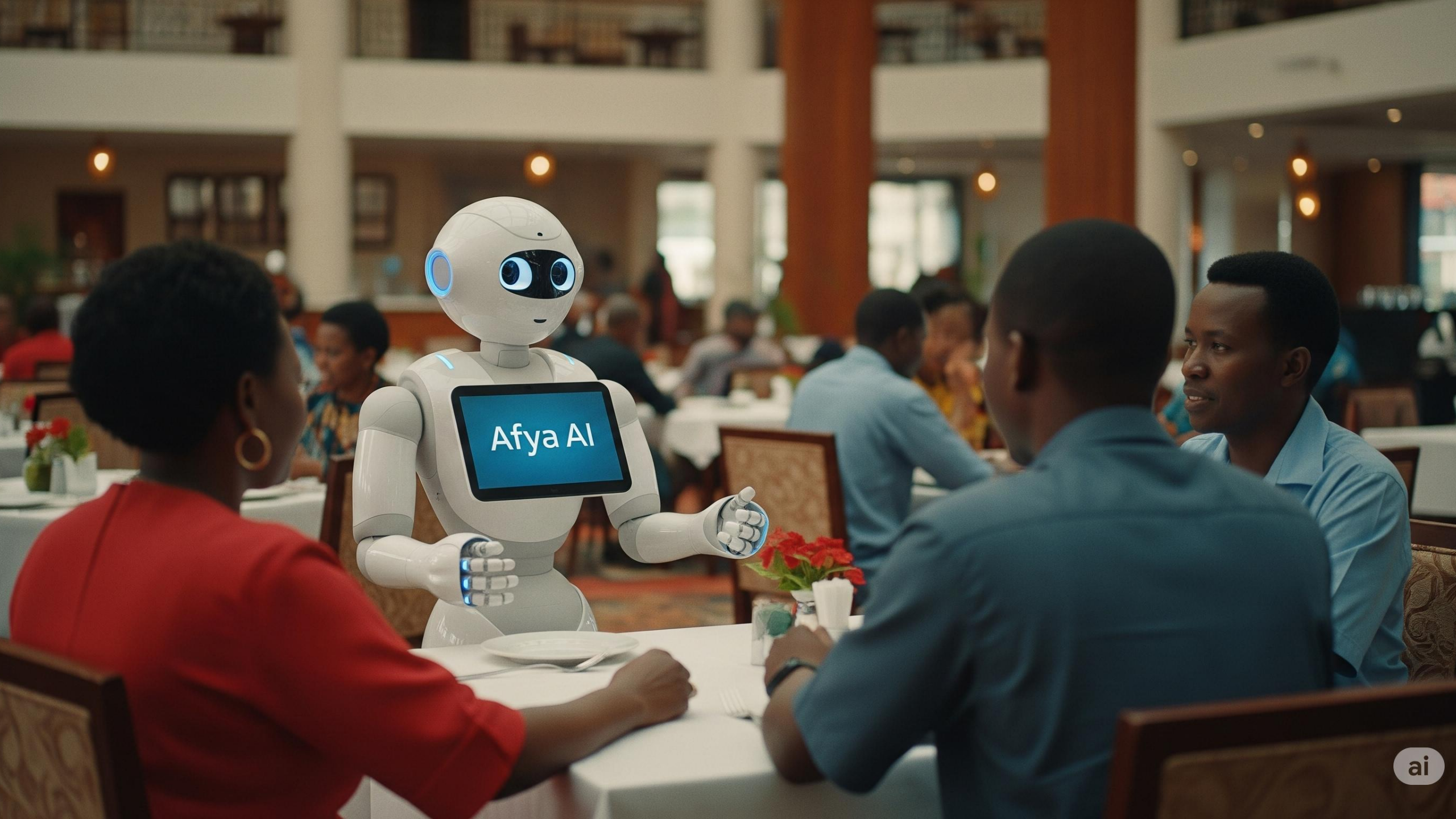
- On the AI summit the innovations which passed this level was 15

AWARD MEMORY OF THE WINNER

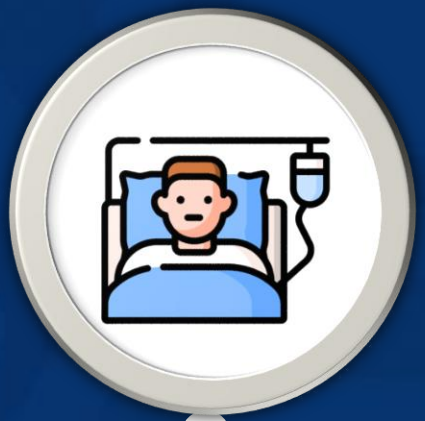
Afya AI

Humanoid robotic software that utilizes deep machine learning & medical-grade AI to manage hypertension & DM



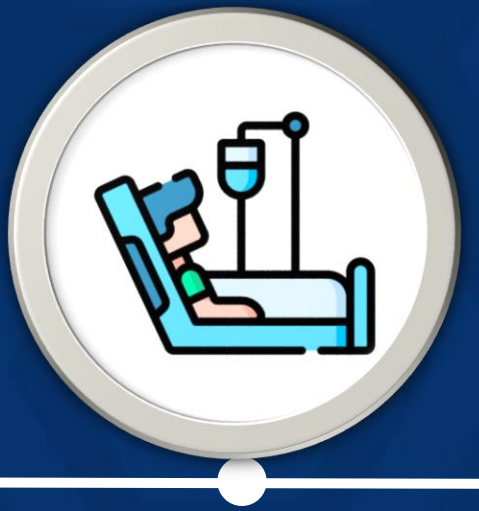

Afya AI

Problem statement



8,000,000 Patients are suffering from hypertension and diabetes.

New cases increasing at 8.1% yearly



20,000,000 Patients in the next 10 years

DHS 2020 et al

THANK YOU!