




Global Digital Health Network

Formerly the mHealth Working Group



Interoperability for Better Health

Dr Alvin B. Marcelo
Executive Director, AeHIN

www.aehin.org

We are a pool of professionals
from South and Southeast Asia
committed to promote

better use of ICTs to achieve better health.



— MEMBERS —
 over 900+
 professionals
 in eHealth, HIS, and CRVS
 in 25 countries



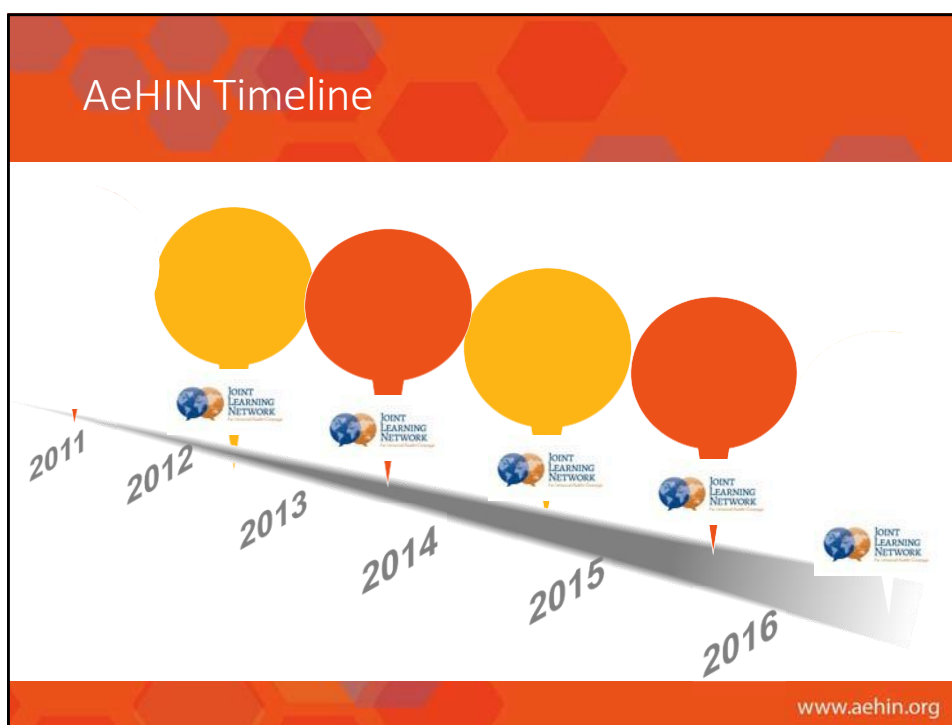
www.aehin.org

— PARTNERS —
 21+

DEVELOPMENT AND
 IMPLEMENTING PARTNERS



www.aehin.org



5th GM and Digital Health Conference, NPT, Myanmar, March 6-10, 2017

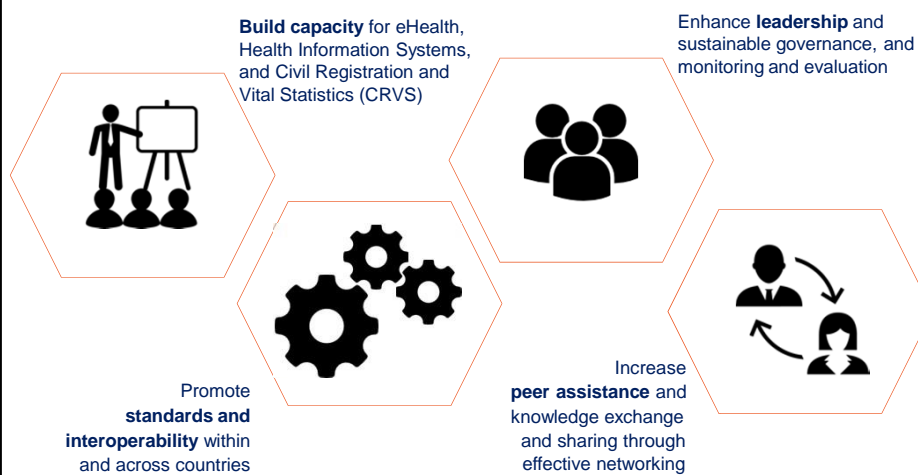
- 300+ participants
- Day 1: All Partners Summit
- Day 2: Pre-conference workshops
- Days 3-4: Digital Health Conference
- Day 5: Study tour and National Consultative Meeting on eHealth Myanmar

www.aehin.org





AeHIN 4 Strategic Areas



www.aehin.org

Training



33 participants,
Philippines,
April 2014



Over 1000+ participants,
65 topics
online courses since
May 2014

Resources Sharing



HINGX
<http://aehin.hingx.org/>

Communications

- Listserv
- Newsletter
- Facebook
- Twitter
- Website
- Policy Briefs



www.aehin.org

Policy Briefs for Effective Use of ICT for National Health Insurance for UHC

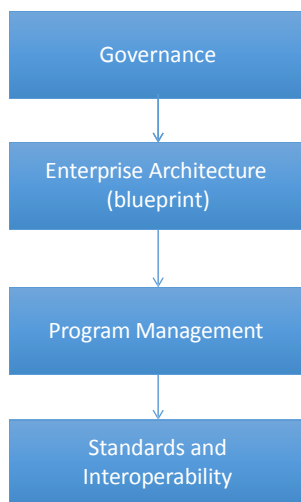


- ADB Policy briefs on health IDs, CRVS, and Geographic Information Systems and Interoperability
- Support to Laos CRVS program
- Special interest groups/services
 - GIS Lab (6)
 - Routine Health Information Systems
 - DHIS2-implementing countries (12)
 - Research (10 PhDs to work on AeHIN topics)
 - Community of Interoperability Labs (5)
- Coming soon: convergence workshops in Vietnam and Nepal

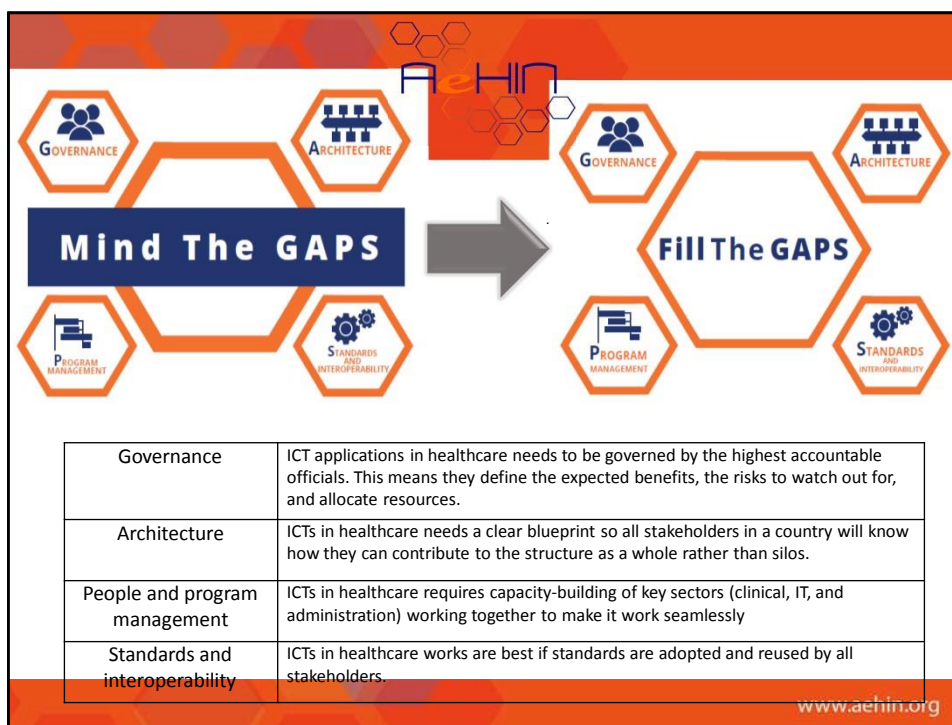
www.aehin.org

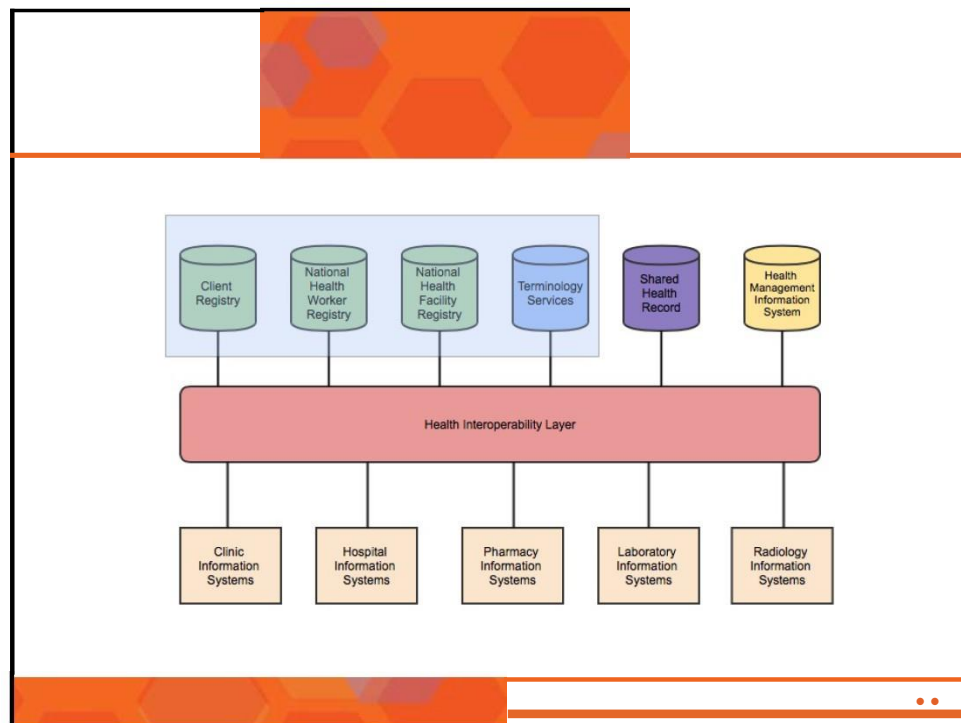
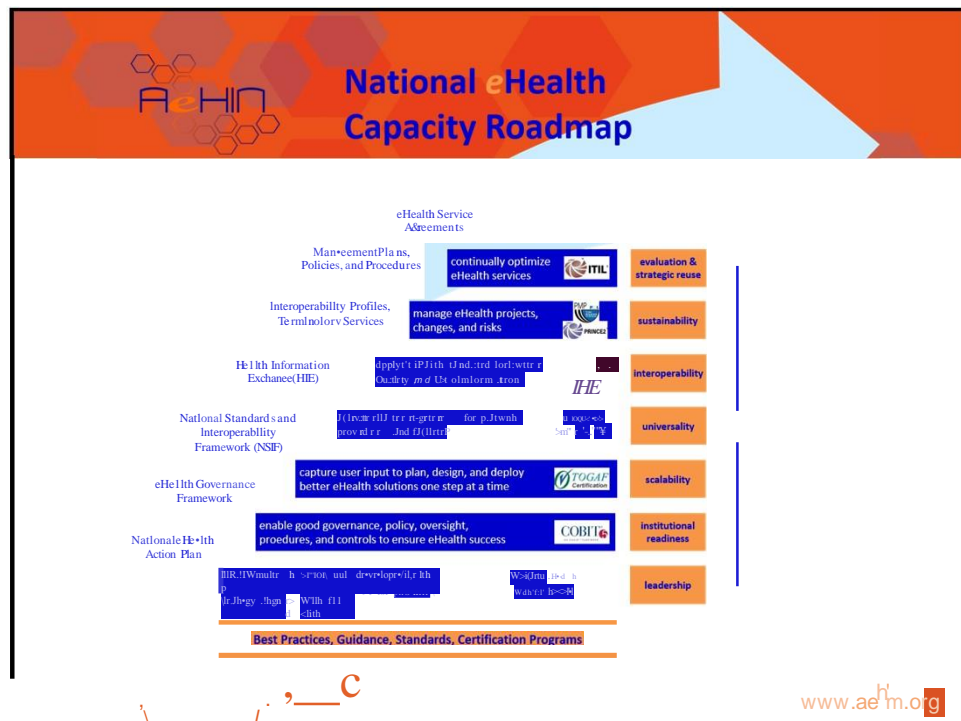


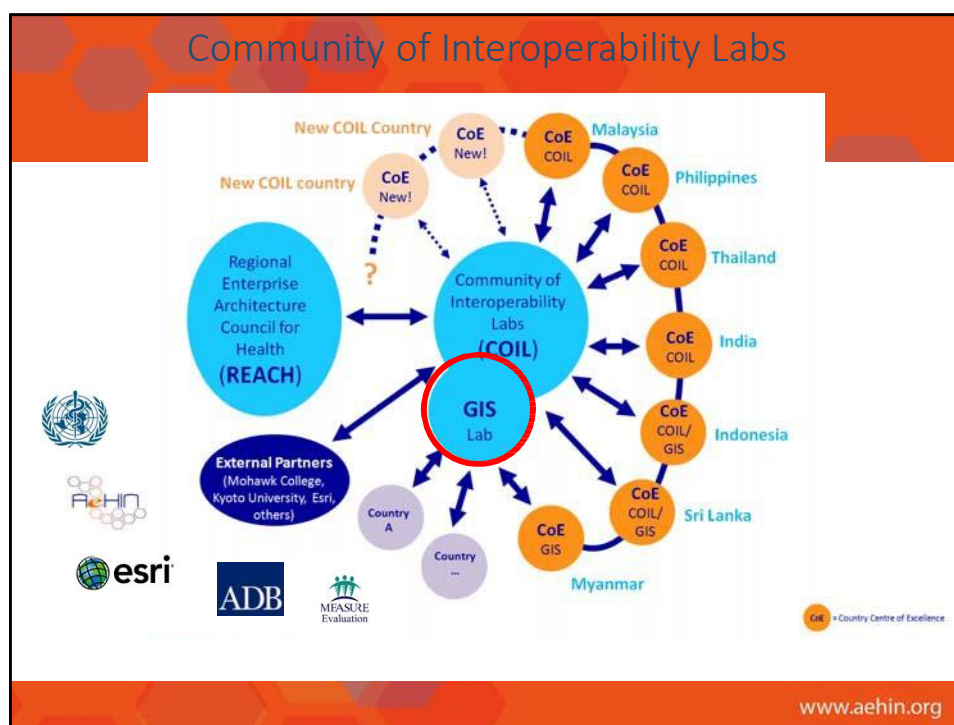
eHealth Development Framework



www.aehin.org







To know more about us, visit

<http://www.aehin.org>

www.aehin.org




**TOWARDS A MULTI-STAKEHOLDER COLLABORATIVE FOR
- Sierra Leone -**

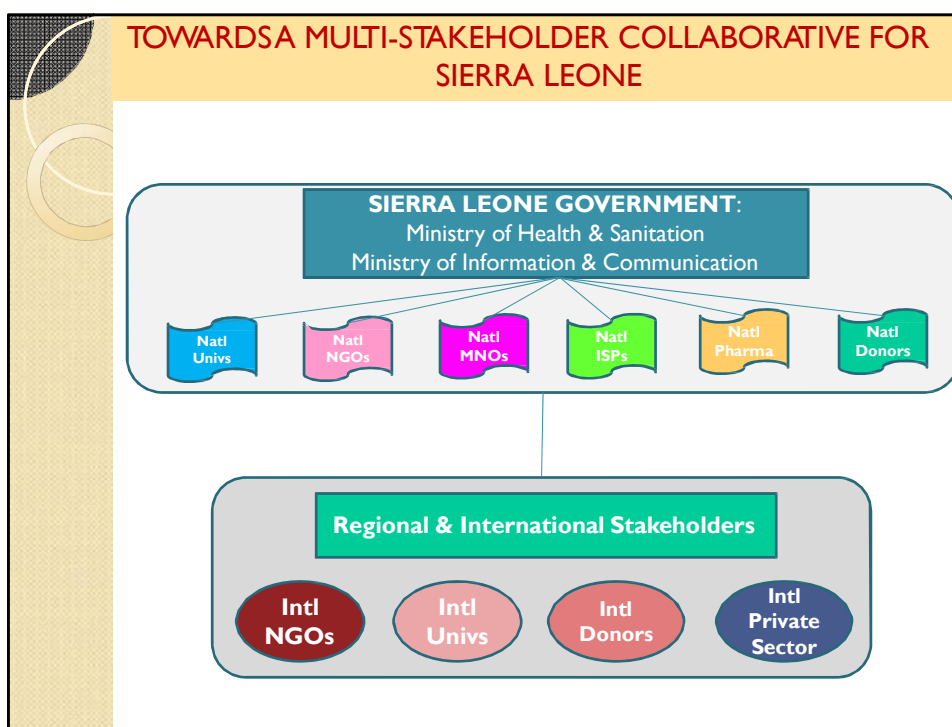
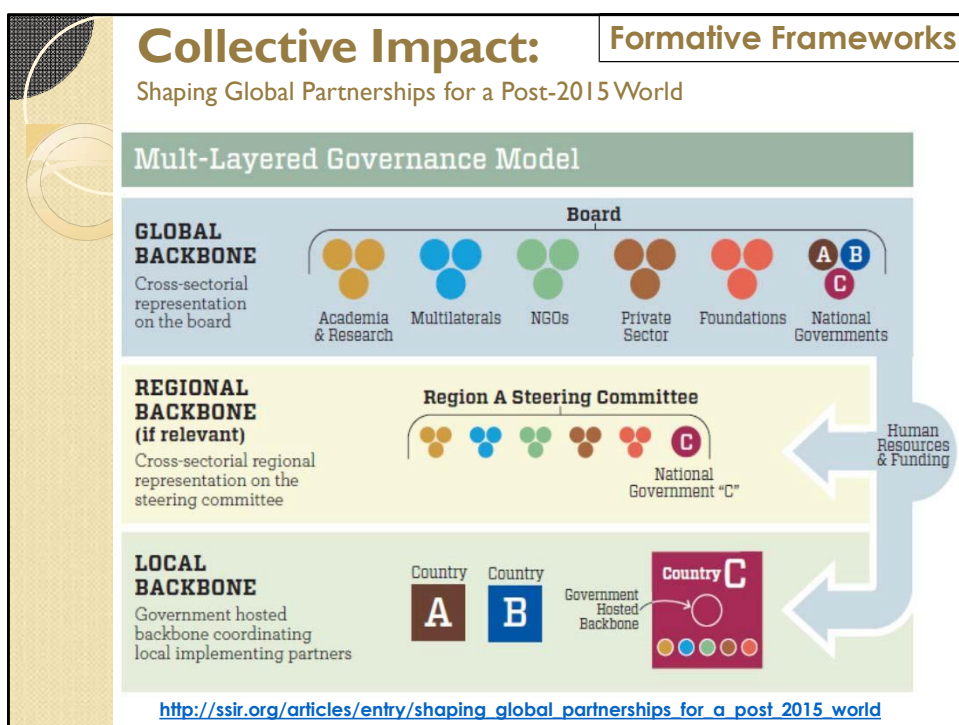


Magnus Conteh, MA, MHSc. (Hons)
Director, Global Health Programmes, Strategic Partnerships & Innovation

Follow me on twitter @MagnusContehIE

MULTI-STAKEHOLDER COLLABORATIVE

- A multi-stakeholder collaborative approach is a structured, interactive process that brings relevant stakeholders together to promote mutual understanding and create shared courses of action.
- All stakeholders—policymakers in health, information technology, and related sectors, healthcare professionals and institutions, non-governmental organizations, civil society groups, multilaterals, researchers and academics, the private sector and donors—have an essential role to play in improving the health of the citizens of a country.
- Such a collaborative process can be used to better identify challenges, align stakeholder priorities and action, and assure accountability for resources and results.






FIGURE 1

WHAT DOES IT TAKE TO INSTITUTIONALIZE A PRODUCT OR SERVICE?

TRIGGER	LEVERS FOR INSTITUTIONALIZATION
The right leader	Leadership
The right solution	Effective product, Viable economic model
The right approach	Supportive policy, regulation and standards, Effective program management
The right capacity	Human capacity

http://www.path.org/publications/files/TS_dhs_journey_to_scale.pdf

Formative Frameworks

FIGURE 2

WHAT IF EVERY DIGITAL HEALTH INVESTMENT WERE...

- ☐ Triggered and selected according to the **needs of the health system**?
- ☐ Mandated and driven by the **Ministry of Health**?
- ☐ Enabled by **committed, long-term funding and robust program management** so solutions have time and support to iterate, evolve, and embed into existing systems and practices?
- ☐ Built around **realistic, long-term funding models**?
- ☐ **Integrated** into existing national platforms?
- ☐ Selected and designed to conform to **agreed standards**?
- ☐ Designed and implemented with the **participation of the end users and long-term implementers**?

TOWARDS A MULTI-STAKEHOLDER COLLABORATIVE FOR SIERRA LEONE

TIMELINE

- **Observations from the Ebola Outbreak**
 - Leveraging the collaborative spirit of the local and international community for Health Systems Strengthening and ICT4D
 - Decision of the MoH to revise the CHW Policy and Strategy
- **Post Ebola Health Information Systems Data Harmonisation Workshop in Accra – May 2015**
- **Wilton Park Meetings**
 - **Wilton Park 1** (June 2015): *(Re)building the Health Systems in West Africa – The Role of ICT and Technologies*
 - **Wilton Park 2** (February 2016): *Unlocking the Community Health Workforce Potential Post Ebola: What Models and Strategies Work*
- **Ratification of the Sustainable Development Goals – [17] Partnerships for the goals**
- **2015 mHealth Summit in DC**
- **Multi-Stakeholder Collaborative Concept Developed** (March 2016)

PURPOSE AND KEY ELEMENTS

FORMULATE & SOLIDIFY

- ❑ A collaborative programmatic approach to support the Government of Sierra Leone in aligning its Community Health Worker (CHW), Health Systems Strengthening (HSS) and Digital Health Strategies
- ❑ A detailed 3-5 year national level CHW, HSS and Digital Health Integration Implementation Plan and Sustainability Business Model

KEY ELEMENTS

- ❑ Initialize a consortium or 'multi-stakeholder collaborative' framework rooted in alignment with CHW and Digital Development Principles to build on Ebola response and recovery harmonization efforts that are beginning to demonstrate results
- ❑ Led by the Government, convene UN/WHO, implementation, technology, private sector and academic partners and stakeholders to refine and build on related national strategies, and design 3-5 year plans for community health which integrates the human components of health systems strengthening (effective recruitment, training, supervision, support, payments etc) with HIS and other data systems

OBJECTIVES

The overall objectives of the MSC approach include:

- ❑ The establishment of a collaborative programmatic approach to support the Government of Sierra Leone (GoSL) to achieve its priorities related to community health and digital health consistent with Government efforts currently underway.
- ❑ Setting the stage for the Government to finalize and execute on a detailed, 3-5 year national level Community Health Worker (CHW) and Digital Health Implementation Plan and sustainability model.
- ❑ Positioning the collaborative programmatic approach as a model for other GoSL partnerships, both within the health sector and across other key GoSL development sectors; and as a model for collaborative development in other countries.

OBJECTIVES

- ❑ Identify initial core funding and other resources needed to implement this plan and begin dialogue with private sector and others who have expressed interest in investing in long term health systems building in the country/region
- ❑ Define Digital Health Architecture – needed to support CHWs
- ❑ Leveraging learnings from other countries, drawing on the expertise of the partners in the consortium, and working in partnership with the MOH and MoIC to devise a sustainable business model framework

MULTI-STAKEHOLDER WORKSHOP

In service of these objectives, the Workshop was a first step, offering both national and international participants the opportunity to:

- ❑ Exchange information and learn from one another regarding:
 - the refined MOHS CHW Strategy,
 - current digital health approaches in Sierra Leone as well as in other African & Asian countries, and
 - the potential of more fully integrating digital technologies into the CHW strategy.

WORKSHOP PARTICIPANTS



WORKSHOP OUTPUTS

Draft Vision Statement

Create a nationally-owned multi-stakeholder collaborative process to support and enhance Sierra Leone's Community Health Workers Programme through the implementation of innovative, functional, and synergistic approaches that ensure improved health outcomes for the people of Sierra Leone.

Draft Mission Statement

The Government of Sierra Leone through the leadership of the Ministry of Health and Sanitation work with their partners to bring innovative best practice in health systems strengthening and digital technology from throughout Sierra Leone and around the world in the service of the MoHS' Community Health Worker Programme, to ensure its effective contribution to the socio-economic and healthy development of the people of Sierra Leone

CURRENT STATUS

Additional Recommendations

1. Put together a working group **to address the question of funding of CHWs.**
 - Bring both local and international experience to this working group.
 - Get other ministries involved in order to discuss innovative funding ideas such as each giving part of their budgets to the CHW programme that has been identified as a priority by government.
- 2. More effectively access the private sector** (i.e. through the Public-Private Partnerships Unit in the President's Office) – both for innovative financing options for the CHW Strategy and for integrating digital technology into the CHW training programme.

WORKSHOP OUTPUTS

3. The Ministry of Health and Sanitation needs to more effectively **exploit the resources that the MoIC has seconded to MoHS.**

This kind of collaboration can help the two ministries to design the necessary architecture *together*, which will also allow for the development and implementation of a policy that maximizes local capacities.

This can be facilitated by the Leadership Working Group of the MSC and ultimately defined in more detail in the MOU signed between the MoHS and the MoIC.
- 4. Capitalize on the existing Bintumani Declaration on Health Information Systems**, signed in August 2016, to jump-start the MSC process. The Declaration highlights three key principles of digital development that touch CHW program:
 - Design with the user in mind
 - Understand the existing ecosystem
 - Be collaborative
- 5. Move forward with the Multistakeholder Collaborative** as soon as the CHW Hub Team has validated the revised CHW strategy in order to capitalize on the momentum generated during the workshop.

WORKSHOP OUTPUTS

WORKING GROUP

1. Leadership

Group

Membership

- Director of Primary Health Care
- 1 DMO (CHW HUB)
- M&E Specialist DPPI
- Deputy Director of Communications
- National MSC Coordinator
- Aspen Institute Fellow (Aspen Management Partnership for Health
- Director Global Health Programmes, Strategic Partnerships & Innovation

1. Capacity Building/Competencies

2. Communications

3. Sustainability

4. Innovative Financing

5. Digital Solutions

WORKSHOP OUTPUTS

THE FIRST STEP

Constitution and operationalization of the Leadership Working Group (LWG).

Between 1 November and 31 December 2016, the Director of Primary Health Care working with the Directorate of Policy Planning and Information (MoHS) will bring together those participants who volunteered for the LWG to bring the MSC approach to fruition.

The first task of the **LWG** will be the **refinement, validation and adoption of the draft vision and mission**, developed during the MSC Workshop.

Secondly, the **LWG** will work with the MoH & MoIC to **develop two MOUs:**

1. the **first MoU** - that can be signed between the two ministries to serve as the mandate for the Multi-Stakeholder Collaborative Process; and
2. the **second MOU** - that can be signed by all stakeholders in the MSC process.

The MSC's vision and mission statements will be incorporated in these documents.

WORKSHOP OUTPUTS

PROPOSED TIMELINES

Participants agreed a timeline for the initial work of the MSC, which will be revised when the LWG begins its ramp-up:

December 2016

- Establish Leadership Working Group
- Develop draft MOU between MoHS and MoIC
- Finalize Working Groups and their members
- Begin advocacy process for MSC Approach

January 2017

- Finalize and sign MOU
- Create terms of reference for each working group

February 2017

- Initiate activities of each Working Group

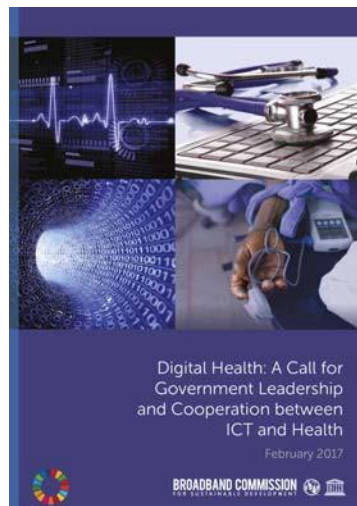
March 2017

- Create, refine and validate Road Map

CURRENT STATUS

- ☐ Workshop initially planned for May 2016, but postponed to October 2016 in order to reassess and solidify communication, dialogue/consultation, planning and the appointment of a National Coordinator for the Collaborative
- ☐ Buy-in and leadership from Government of Sierra Leone secured
- ☐ Interest solidified among local & international stakeholders, including NGOs, UN agencies, donor representatives, private sector, etc.
- ☐ MSC National Coordinator appointed on a short-term contract. A one year contract has now been agreed with a new candidate to March 2018
- ☐ Additional progress achieved on revisions to National CHW Policy & Strategy including validation workshop.
- ☐ Development of the new CHW National Curriculum with rollout of ToT now in progress under the leadership of the CHW Hub

DEVELOPMENT OF eHEALTH STRATEGY



INTRA-MINISTARIAL COLLABORATION



RECOMMENDATIONS FOR ENGAGING NATIONAL GOVERNMENTS

- It is critical and prudent to engage with governments as early as possible to secure buy-in for sustainability
- Different levels of engagement and sequencing
 - Political, Administrative & Technical Staff (Civil Service)
 - Regulatory, Legal, Cultural
- Articulate the benefits of the technology not only in terms of its functionality but the health benefit, efficiency gains and cost savings
- Identify champions and early adopters and implementers
- Leverage trust and relationships building
- Assess capacity gaps and support ministry capacity building
- Alignment with ministry strategies while advocating for changes and/or improvements where necessary

SPONSORS







MINISTRY OF INFORMATION & COMMUNICATIONS



Relevance of eGovernance & ICT Strategies to Health Care Delivery
Presentation By: Mohamed M Jalloh
Deputy Director of Communications (eGovernment)
@
Multi-Stakeholder Collaborative Workshop
For Sierra Leone

Ministry of Information and Communications
Government of Sierra Leone





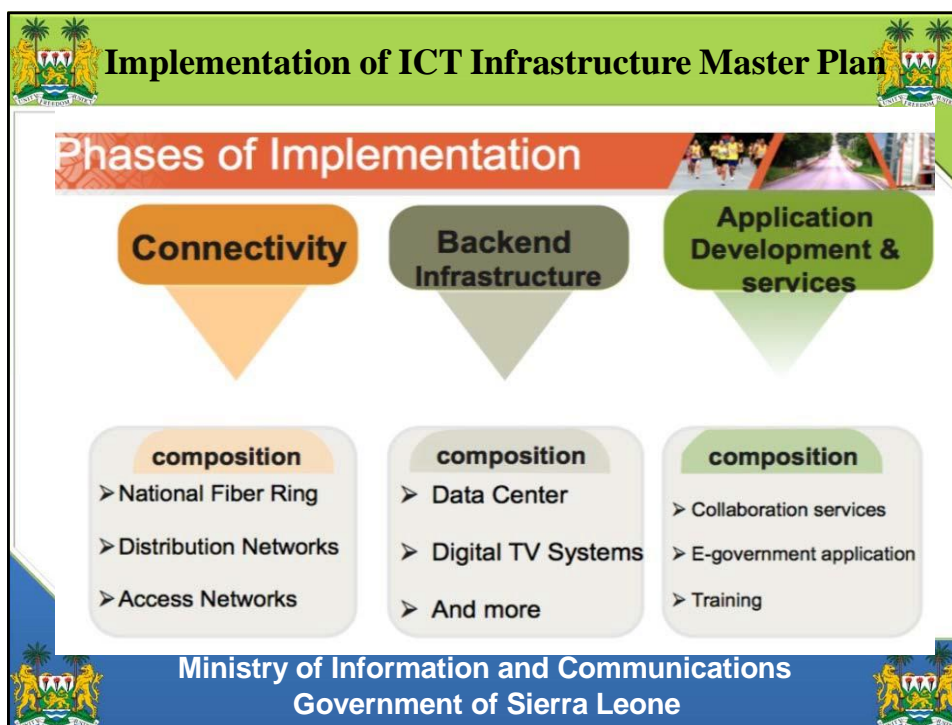
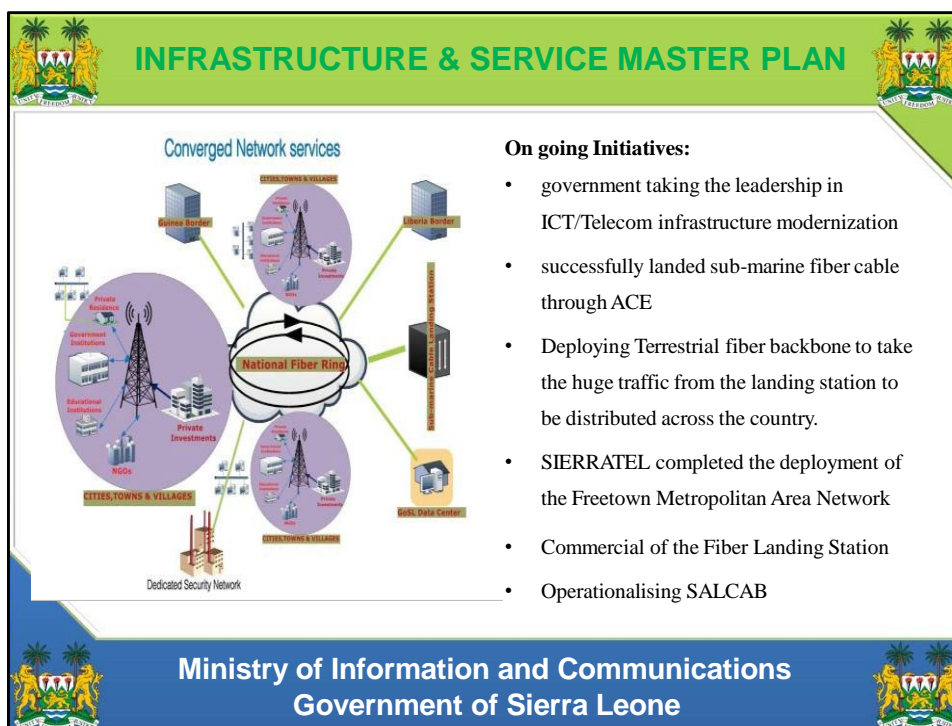
Benefit of Broadband to National Development

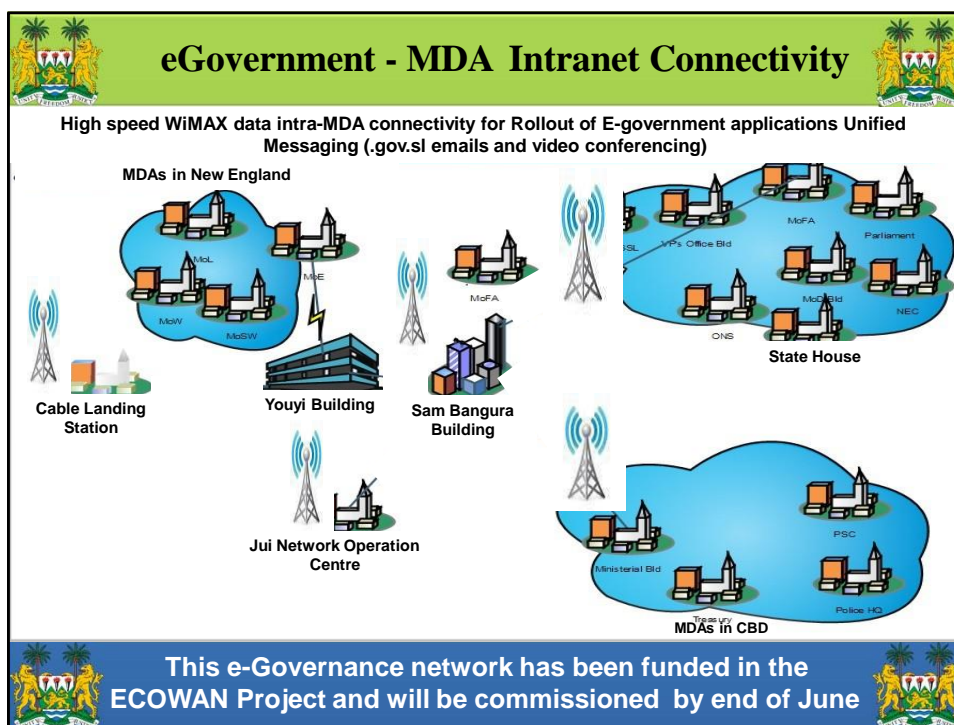
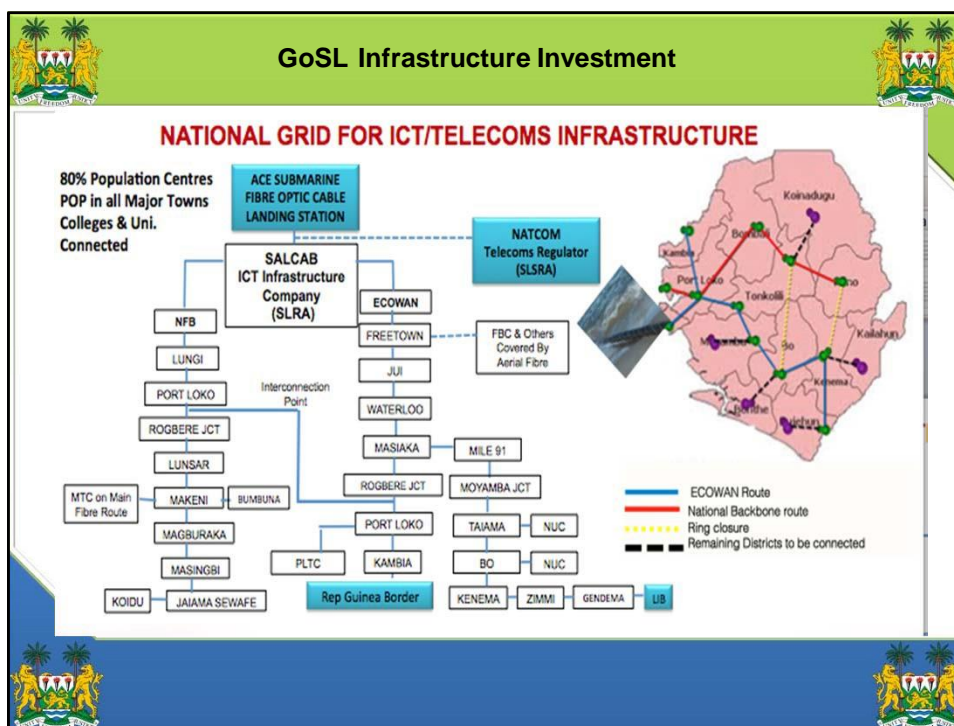
PRESENTATION AGENDA

- Background
- Policy Goal and Vision of MIC
- Current GoSL Infrastructure Investment
- ICT Policy for the health Sector
- The Case for eHealth
- Conclusion

Ministry of Information and Communications
Government of Sierra Leone









Policy Goal and Vision of Ministry of Information & Communication



GOAL
To Develop ICT/Telecom Sector as a Platform for Economic Prosperity

Vision
To Ensure accessible, reliable and affordable ICT and Telecommunication Services for all

Resultant Effect

- ICT as critical pillar of the Economy
- ICT as Catalyst for Sustainable Socio-Economic Development
- Increase Citizens Participation in Governance
- Business Friendly Environment
- Improve International Competitiveness

Key Policies currently under consideration

- Revised 2016 National ICT Policy – validated awaiting Cabinet approval
- National Electronic Transaction Policy – Validated & approved by Cabinet
- National Cyber Security Policy – validated awaiting Cabinet approval
- National Digital Broadcasting Policy - validated awaiting Cabinet approval
- National Infrastructure Sharing Policy – To Be Developed
- National Universal Access/service Policy – To Be Developed

Key Regulatory Instrument under consideration

- Revision of the 2006 Amended 2009 Telecom ACT
 - Second draft Electronic Communications under internal review (NATCOM & MIC)
 - Stakeholder Consultation and Validation
- National Data Protection and Cyber Security Law – Draft awaiting stakeholder validation



Ministry of Information and Communications
Government of Sierra Leone





The National ICT Policy Goal for the Health Sector



Policy of goal of the Government is to improve access to quality healthcare as close to the family as possible through the deployment and exploitation of ICTs and other modern technologies.

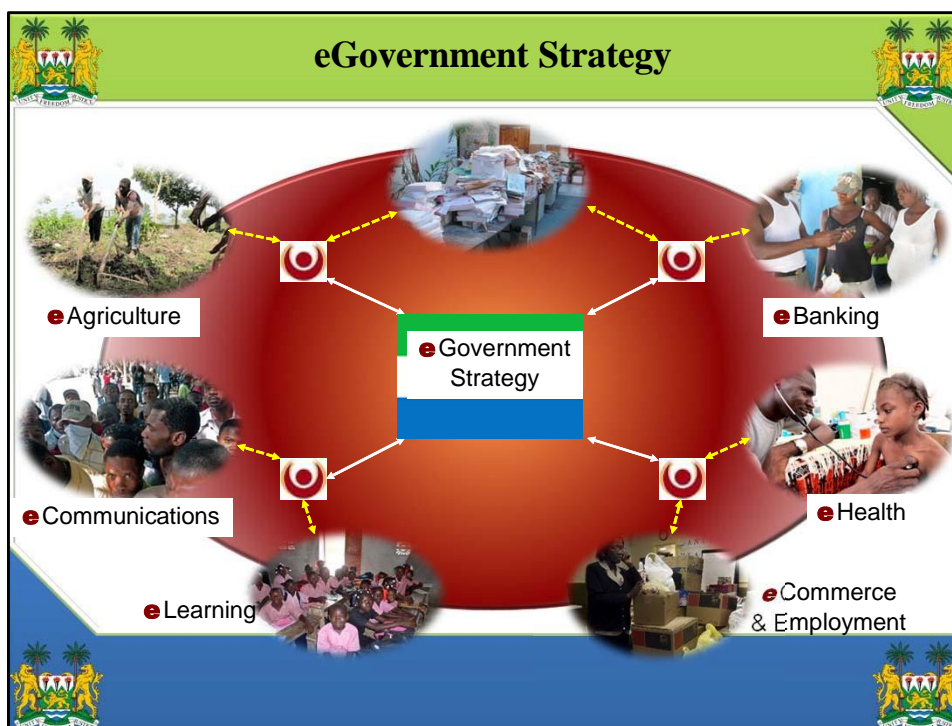
Objective

- Establish a governance structure to coordinate the implementation of the e-Health strategy
- Develop an appropriate National Health Management Information System;
- Facilitate connectivity and access to communication services in health institutions to support healthcare delivery;
- Develop appropriate ICT infrastructure at all levels of the healthcare system to support the collection, use, management and dissemination of health care information;
- Promote and encourage ICT training and skills development among healthcare professionals;
- Initiatives aimed at combating major national health threats



Ministry of Information and Communications
Government of Sierra Leone

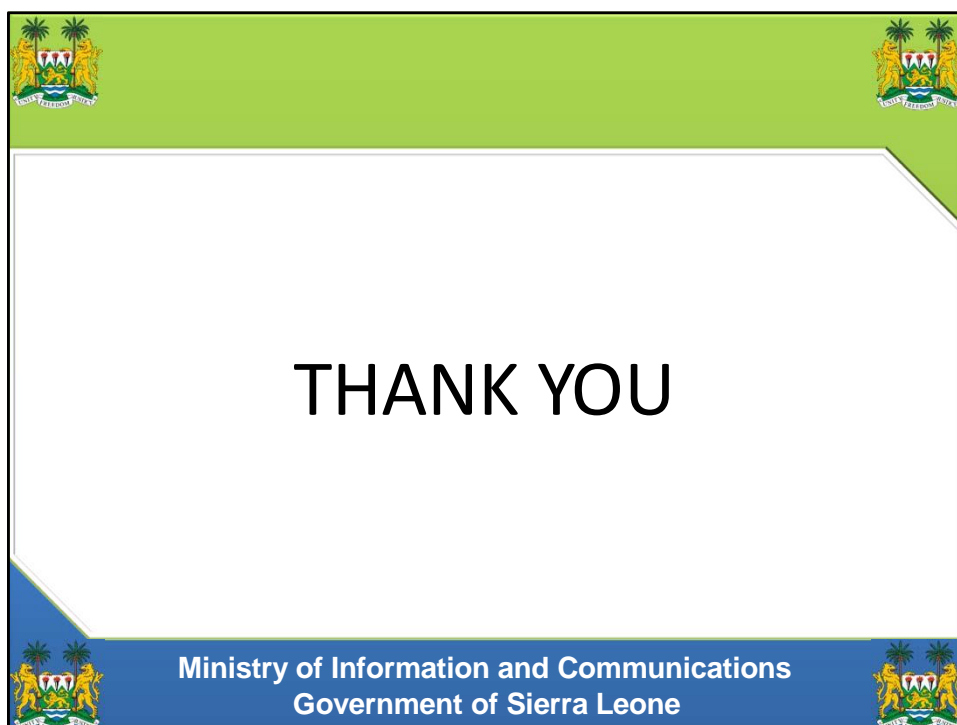




The Benefit of eHealth

- Enable more efficient use of healthcare resources by providing better information for decision making.
- Enable the health sector to operate more effectively as a connected system, overcoming fragmentation and duplication of service delivery.
- Make patient care safe and effective by ensuring that the correct information is available in a timely manner, where it is needed and to whom it is needed.
- Enable electronic access to appropriate healthcare services for patients in remote, rural, and disadvantaged communities.
- Support improved multi-way communication and sharing of information among clinicians, patients, and caregivers within the health sectors and across partner agencies.
- Support evidence-based policy, through access to timely, accurate, and comprehensive reporting of healthcare system information.

**Ministry of Information and Communications
Government of Sierra Leone**






Coordinating Digital Health

The Health Data Collaborative (HDC) & the PATH digital health initiative

Adele Waugaman
USAID/Bureau for Global Health



Presentation to the Global Digital Health Network
April 19, 2017




Health Data Collaborative (HDC)

HDC Digital Health & Interoperability Working Group



PATH 'digital health initiative'

WHAT IS THE HEALTH DATA COLLABORATIVE?




3

A JOINT EFFORT BY COUNTRIES, DEVELOPMENT PARTNERS, CIVIL SOCIETY AND ACADEMIA TO:

- **STRENGTHEN** NATIONAL HEALTH INFORMATION SYSTEMS
- **IMPROVE** THE QUALITY OF HEALTH DATA
- **BUILD CAPACITY** TO TRACK PROGRESS TOWARDS SUSTAINABLE DEVELOPMENT GOALS




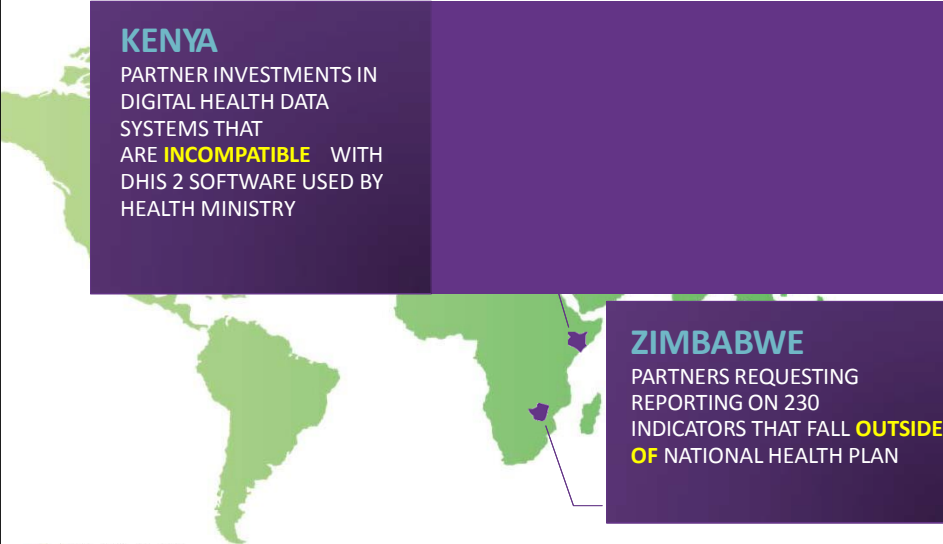
4




WHY DO WE NEED THE HEALTH DATA COLLABORATIVE APPROACH?




5

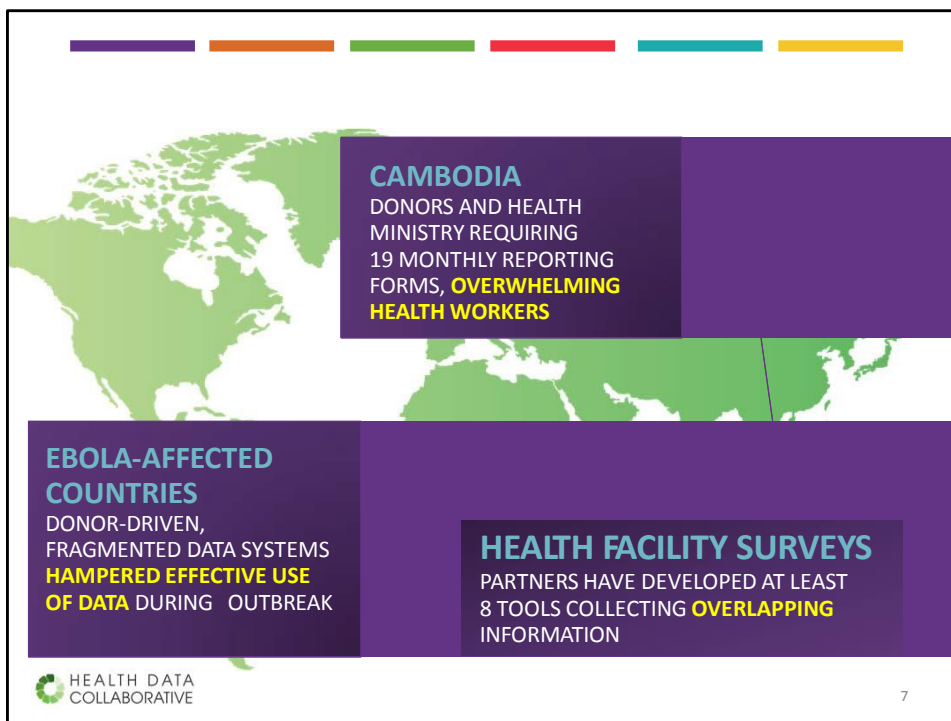



KENYA
PARTNER INVESTMENTS IN
DIGITAL HEALTH DATA
SYSTEMS THAT
ARE **INCOMPATIBLE** WITH
DHIS 2 SOFTWARE USED BY
HEALTH MINISTRY

ZIMBABWE
PARTNERS REQUESTING
REPORTING ON 230
INDICATORS THAT FALL **OUTSIDE**
OF NATIONAL HEALTH PLAN



6



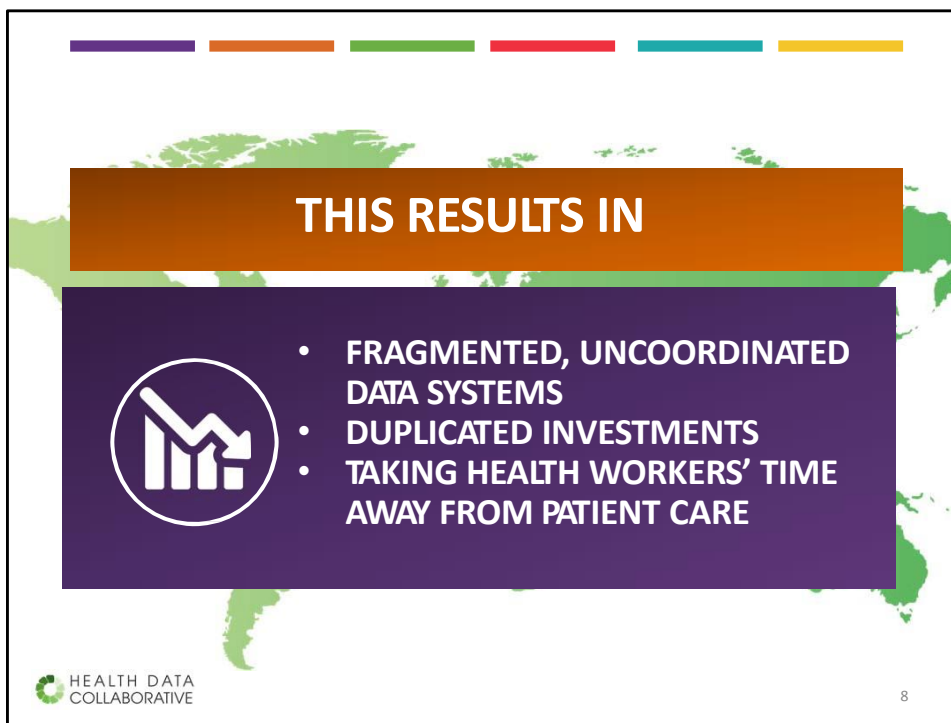
CAMBODIA
DONORS AND HEALTH MINISTRY REQUIRING 19 MONTHLY REPORTING FORMS, **OVERWHELMING HEALTH WORKERS**

EBOLA-AFFECTED COUNTRIES
DONOR-DRIVEN, FRAGMENTED DATA SYSTEMS **HAMPERED EFFECTIVE USE OF DATA** DURING OUTBREAK

HEALTH FACILITY SURVEYS
PARTNERS HAVE DEVELOPED AT LEAST 8 TOOLS COLLECTING **OVERLAPPING** INFORMATION

HEALTH DATA COLLABORATIVE

7



THIS RESULTS IN

- **FRAGMENTED, UNCOORDINATED DATA SYSTEMS**
- **DUPLICATED INVESTMENTS**
- **TAKING HEALTH WORKERS' TIME AWAY FROM PATIENT CARE**

HEALTH DATA COLLABORATIVE

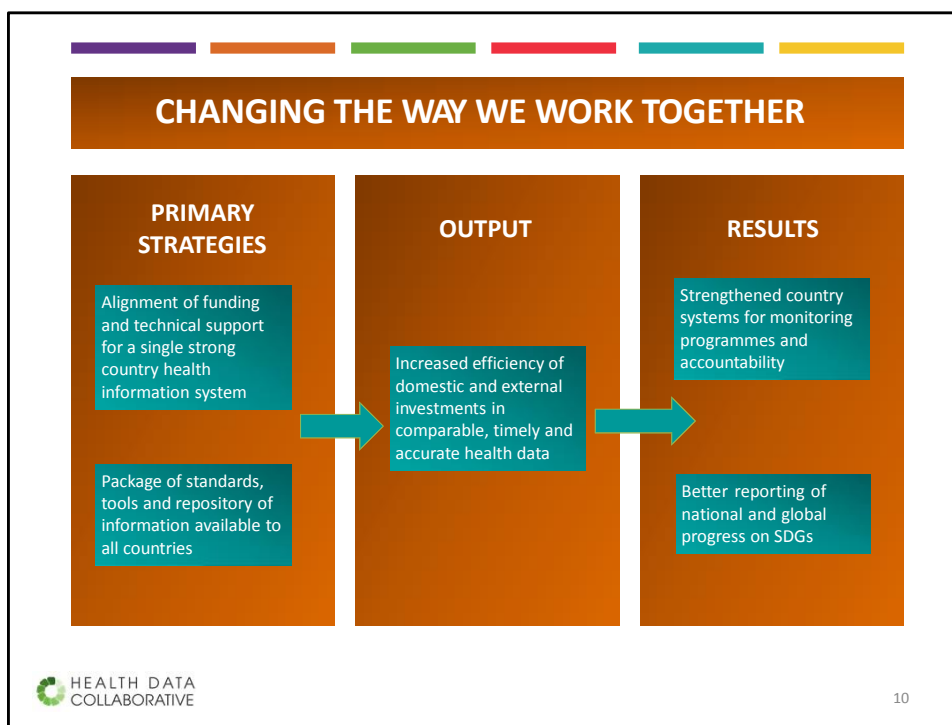
8




WHAT ARE WE DOING ABOUT THIS?



9





WHY NOW?

HEALTH DATA
COLLABORATIVE

11



**COUNTRIES NEED GOOD QUALITY
DATA TO TRACK PROGRESS TOWARD
THE HEALTH-RELATED SUSTAINABLE
DEVELOPMENT GOALS, INCLUDING
UNIVERSAL HEALTH COVERAGE**


HEALTH DATA
COLLABORATIVE





WHAT WILL WE DELIVER?










13



Technical package of tools and standards to strengthen country data systems



-  Improve **birth and death registrations**
-  Improve **facility and community data**, including disease surveillance
-  Improve collection of **health workforce data**
-  Improve tracking of **health spending**
-  Improve capacity for **data analytics and use**

14



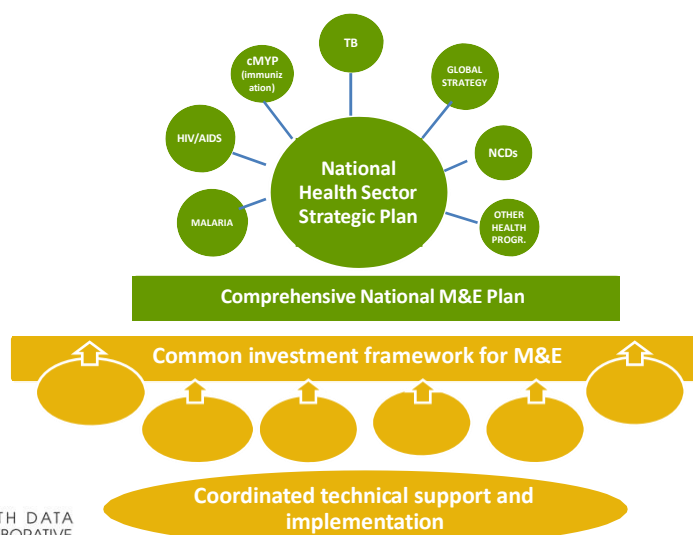
15

DELIVERABLES BY WORKING GROUP	
Country and regional engagement	<ul style="list-style-type: none"> M&E assessment, planning & costing tool Engagement with 4-5 pathfinder countries + 4 specific needs Collective technical action to support country M&E /HIS priorities
Facility and community data	<ul style="list-style-type: none"> Package of data standards (RHIS curriculum, indicators, data quality, analyses, use) Joint investment plan for DHIS Quality of care metrics and methodologies Harmonized facility survey indicators, modules
Civil Registration and Vital Statistics (CRVS)	<ul style="list-style-type: none"> E-learning course on CRVS Aligned country support and best practices
Health systems monitoring	<ul style="list-style-type: none"> Handbook on national health workforce accounts Package of guidelines and tools for unified resource tracking
Digital health systems and interoperability	<ul style="list-style-type: none"> Guidelines & standards for national digital health architectures Country strategic digital health investment plans /interoperability lab Functioning use cases (eg. IDSR integrated into HMIS, open health facility registry)
Analysis & use	<ul style="list-style-type: none"> Country assessments on barriers to data use & best practices Guidance and suite of electronic tools to strengthen institutional capacity
Country & global data & statistics	<ul style="list-style-type: none"> Global health observatory revamped for health SDG monitoring Open data policy guidance & national health observatories

16


HOW DO WE ENGAGE WITH COUNTRIES?

GETTING BEHIND COUNTRY PRIORITIES



COUNTRY ENGAGEMENT APPROACH


Principles of engagement	<ul style="list-style-type: none"> ✓ Country-led with strong country stewardship ✓ Opportunities for collective action & joint investment ✓ Broad stakeholder participation
Type of engagement	<ul style="list-style-type: none"> ✓ Strategic request for collective action linked to M&E /HIS plans ✓ Focused request for collective action (i.e. HMIS) ✓ Joint learning & documenting best practice
Where we engage	<ul style="list-style-type: none"> ✓ In 2016-17, at least 5 countries (starting with Kenya and Malawi) ✓ Approach will be scaled up in more countries over subsequent years



HEALTH DATA COLLABORATIVE


19


KENYA HEALTH DATA COLLABORATIVE
 (Launched May 18, 2016)



ALL STAKEHOLDERS SUPPORTING KENYA'S M&E PRIORITIES

- DATA ANALYTICS CAPACITY
- QUALITY OF CARE
- KENYA HEALTH DATA OBSERVATORY
- CRVS
- MID-TERM REVIEW





HEALTH DATA COLLABORATIVE

20

**“WE NOW EXPECT ALL HEALTH DATA
COLLABORATIVE PARTNERS TO PULL IN THE
SAME DIRECTION AND IN LINE WITH OUR
OWN VISION AND GOALS.”**

DR NICHOLAS MURAGURI,
PRINCIPAL SECRETARY,
KENYA MINISTRY OF HEALTH

REGIONAL ENGAGEMENT IN ASIA



Peer learning and review

Bangladesh Nepal,
Philippines, Cambodia, Bhutan,
Indonesia, Myanmar and South
Africa







HOW WILL WE MEASURE SUCCESS?




HEALTH DATA
COLLABORATIVE

23



MONITOR PERFORMANCE OF PROGRESS AGAINST
LOGFRAME METRICS

GLOBAL REPORT ON STATE OF COUNTRY HIS
(2017)



HEALTH DATA
COLLABORATIVE

24



WHO ARE THE PARTNERS?

HEALTH DATA COLLABORATIVE

25



TO-DATE: 32 PARTNER COMMITMENTS



HEALTH DATA COLLABORATIVE

26

Health Data Collaborative (HDC)

HDC Digital Health & Interoperability Working Group

PATH 'digital health initiative'

Digital Health & Interoperability Working Group

Objectives

1. Optimize the meaningful use and reuse of health information in low- and middle-income countries to support achievement of the SDGs through implementation of foundational digital health infrastructures
2. Actively promote the development, use and long-term support of digital health 'global public goods'
3. Increase, in a measurable way, the level and alignment of country and partner investments in support of obj. 1 & 2

Fast Facts

- Launched in June 2016
- 80+ individual members
- Nearly 40 organizations represented
- 4 Co-chair affiliations: USAID, WHO, OGAC/Regenstrief
- Monthly audio call, twice-yearly in person meeting
- Communications regularly via Google Groups listserv and Slack
- Secretariat hosted by PATH digital health initiative
- Members include:





DH&I Working Group 2017 Activities

- Respond to requests for support from Malawi, Nigeria, Senegal, Sierra Leone, Tanzania
- Develop a digital health and interoperability capability and maturity matrix to assess where countries fall along the maturity continuum
- Develop a business case for investments in interoperable digital health tools and architecture
- Develop a digital health taxonomy to more systematically describe related activities

To join: contact Lauren Wall llwall@path.org



Health Data Collaborative (HDC)

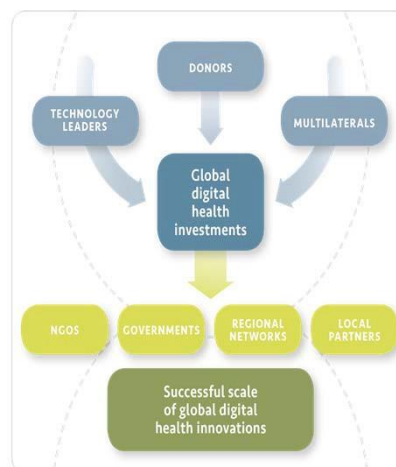
HDC Digital Health & Interoperability Working Group

PATH 'digital health initiative'



Digital Health Initiative: Overview

- New '*center of gravity*' for global digital health advocacy and investment
- Partnership between PATH, USAID, and 40+ partners in the digital health community.... Inviting other donor organizations to participate
- Bringing together technology leaders, NGOs, governments, and regional networks, with local partners, to scale digital health innovations around the world



Core Focus Areas

