



DIGITAL REACH INITIATIVE

A Novel Approach for Shaping the Future of Health and Development in East Africa

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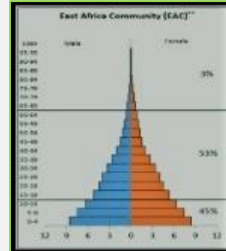


EAC PARTNER STATES

EAC a REC of 6 countries

Kenya, Rwanda, Burundi, S. Sudan, Uganda, Tanzania, etc.,
 HQ in Arusha, Tanzania

- Pop ~200 Million (Worldometer); > 78% rural
- Young pop: <35 yrs ~ 80% (Awiti & Scott, EAI 2016)
- GDP >\$160 Bil (UNECA, 2014)
- Fastest growing REC:
 - Hotspot for Tourism and investment
- Use of mobile phones >80%



Mission: socioeconomic, and political integration

- Free movement of people, business
- Customs Union; Common market
- > Monetary Union, Political Federation

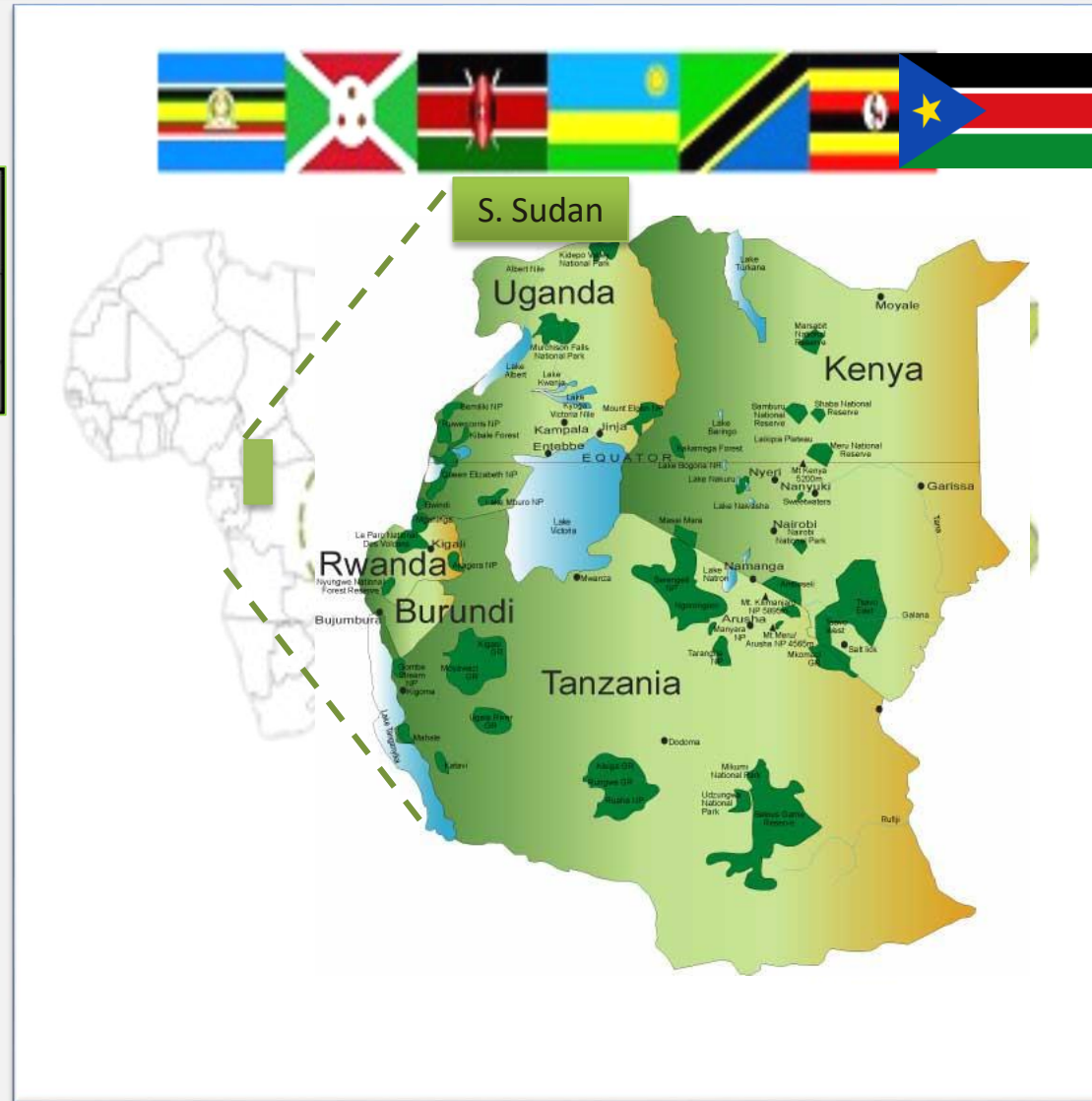
Organization

EAC Secretariat	EAC Council of Ministers
EA Legislative Assembly	EAC Summit/Presidents
EA Court of Justice	

EAC decisions are legally binding to all Partner States

Specialised implementation institutions

EAHRC = Principal advisory body on health, generates evidence





Key health-associated challenges of the millennium

• Globalisation

- Trade and Transportation
- A delicate balance
 - Health opportunities vs threats

• Global climate change

- Human actions → global climate change:
draught/floods, heat/cold → serious health risks

• Increase in NCDs

- Diabetes, heart, cancer
 - Cancer belt in Eastern-southern Africa

• Convergence of NCDs and IDs (TDs)

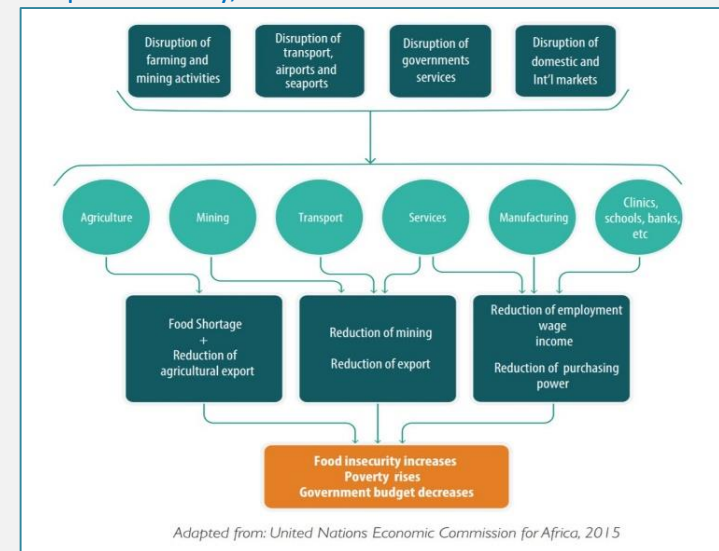
- NCDs in chronic IDs, NTDs, (re)-emerging diseases
- The co-existence → to specific features
 - HIV & Diabetes
 - Tuberculosis & Diabetes
 - HIV & Cancers
 - » Complex, (life) long treatment

• Antimicrobial resistance

- Real and highly prevalent (WHO Report, 2014)
- Higher mortality than recovery rates from IDs

• Deadly epidemics are still eminent

- Movement of human and products
 - 1 million people travel/day
 - 1 million people travel between HICs and LMICs/Week
- Human-livestock-wildlife interphase
 - (re)-emerging epidemics
- Prevalence of 7 causes of the world most deadly outbreaks
 - **Polio, TB, HIV, Malaria, Bubonic plague, Yellow fever, Cholera**
- New outbreaks – Ebola, Zika, etc.
- One disease outbreak is a risk to all globally
- Disrupts economy, business



"As Ebola rages through west Africa, claiming lives, jumping continents and inciting fear, world leaders must take note and learn from the epidemic because this won't be the last to ravage lives and rattle governments"
Bill Gates, ASTMH, in New Orleans, Nov 2014



Citizen-oriented Digital REACH Initiative

Digital Regional East African Community Health Initiative

Approved by the Presidents of the six EAC member countries

This is a new, ground-breaking initiative

Developed collaboratively by all EAC Partner States

To implement ICT across all dimensions of the health sector in EA

To transform health outcomes of millions of people across East Africa

Regionally coordinated to provide a robust enabling and investment environment,
and to generate evidences through implementation of strategic regional DH programs



Brings together:

Governments of the EAC

Development partners

Private sector partners

and Other stakeholders

Official Launch of the Digital REACH Initiative Strategic Plan, and East African Health & Scientific Conference on Digital Health 27th – 29th March 2019, Dar Es Salaam, Tanzania

The Initiative launched by
the Vice President of Tanzania
Health and Scientific Conference dedicated on
Digital Health in East Africa
Theme: Technology for health systems
transformation and attainment of
the UN-SDGs in EA

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Key note speech

Invest in Digital Health to catalyze East Africa
to attain the SDGs

Plenary and Parallel Sessions

Various aspects of Digital Health; Evidence-based
Symposia

Digital Health:

Role of Governments;

Status and gaps in Digital Health;

Regional role: Harmonization, Standardization,
Interoperability, and Responsible data practice;

Public Private Partnership (PPP).
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Digital REACH Initiative: Vision & Mission

Vision 2028

Interconnected health systems for a healthy and prosperous East Africa.

Mission Statement

Maximise the power of digital health in East Africa by ensuring an enabling environment and by implementing scaled, coordinated, transformational, and innovative approaches.



Application of Digital REACH Initiative



Public Health Education & Awareness

Enhance Public Health Education and Awareness



Diagnostic & Treatment Support

Optimise the Prevention, Diagnosis, and Treatment of Priority Health Conditions



Health Worker Training

Improve Health Worker Education and Training



Data Collection & Surveillance

Improve and Integrate Disease Surveillance and Response



Support Universal Access to Healthcare (UHC)



Supply Chain Management

Improve Supply Chain Efficiency



Resource Allocation & Management

Optimise Human Resource Allocation and Management



Population Health Status

Monitor Population Health Status

TARGETED USER

Patients/Population

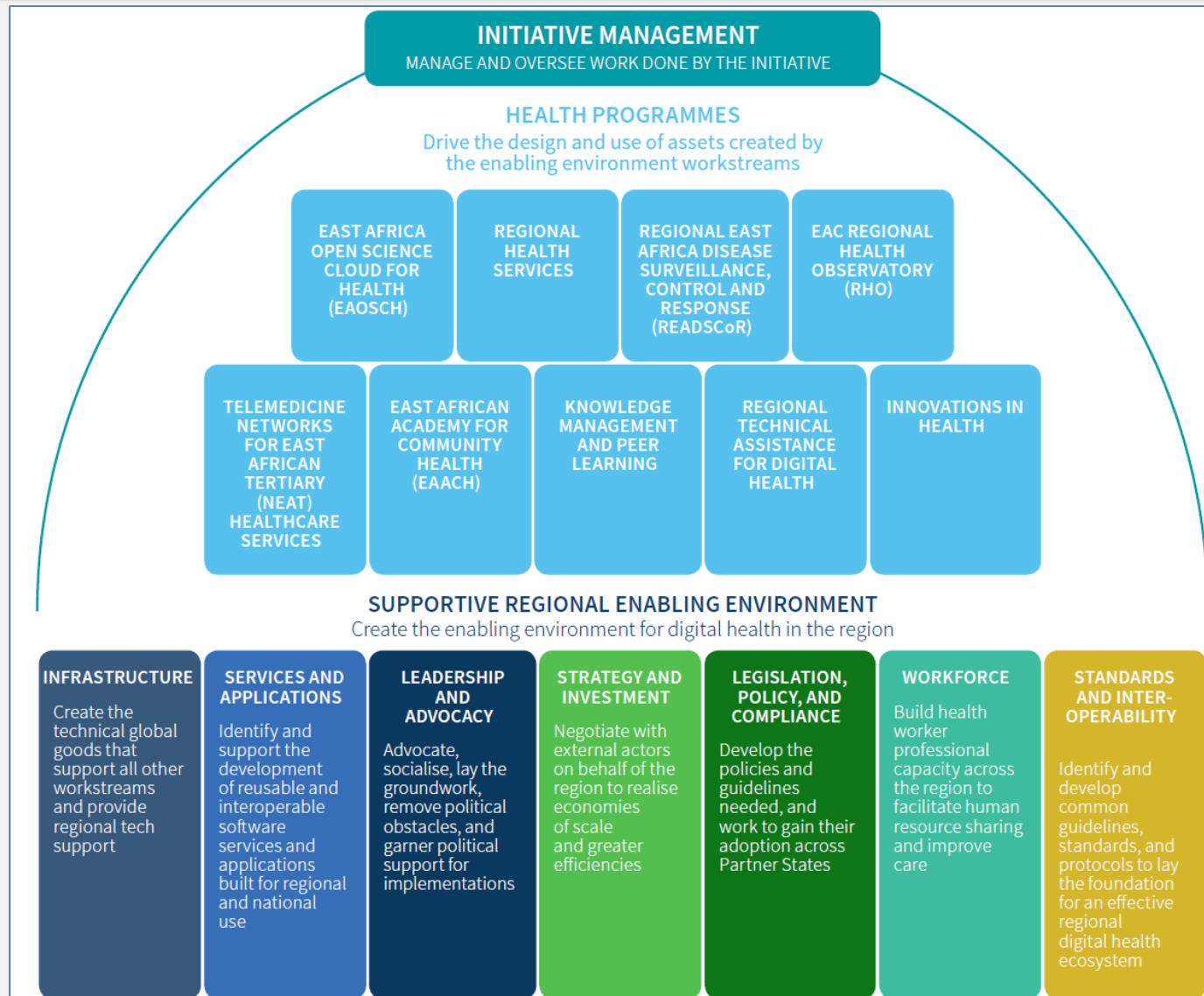
Health Service Workers

Health Officials



Workstreams and Health Programmes

- Nine Workstreams
 - Run in parallel
 - Complement each other
 - Select priority activities
- The Health Programmes Workstream
 - Implementation of specific, strategic health programmes
- The seven Enabling Environment Workstreams
 - Creation of an enabling environment for the Initiative
 - Shared across the Partner States
 - Supports health programme implementations
- An overarching workstream for Initiative Management
 - Lead and manage the Initiative





Priority Health Programmes

Level of Priority:

High

Low

<p>TELEMEDICINE NETWORKS FOR EAST AFRICAN TERTIARY (NEAT) HEALTHCARE SERVICES</p> <p>Implement telemedicine to link East African Centres of Excellence and specialised health care facilities across the region.</p> 	<p>REGIONAL EAST AFRICA DISEASE SURVEILLANCE, CONTROL AND RESPONSE (READSCoR)</p> <p>Design a health alert and early warning system for disease outbreaks and epidemics in the region.</p> 	<p>EAST AFRICAN ACADEMY FOR COMMUNITY HEALTH (EAACH)</p> <p>Establish a community training and learning platform to improve health education and awareness, and train frontline workforce in the community leveraging digital technology.</p> 	<p>EAC REGIONAL HEALTH OBSERVATORY (RHO)</p> <p>Create a Regional Health Observatory to facilitate access to data, information, analyses, and empirical evidence for monitoring and evaluating regional health.</p> 	<p>EAST AFRICA OPEN SCIENCE CLOUD FOR HEALTH (EAOSCH)</p> <p>Utilise the EAOSCH to support health research and better understand health trends and outcomes in the region.</p> 
<p>REGIONAL HEALTH SERVICES</p> <p>Implement programmes that strengthen cross-border and regional health by sharing data in priority cross-border communities and supporting portability of health insurance.</p> 	<p>KNOWLEDGE MANAGEMENT AND PEER LEARNING</p> <p>Support peer learning and the creation of reusable assets in the region through the implementation of knowledge management platforms.</p> 	<p>REGIONAL TECHNICAL ASSISTANCE FOR DIGITAL HEALTH</p> <p>Build digital health capacity in Partner States in areas that support the implementation of Digital REACH Initiative.</p> 	<p>INNOVATIONS IN HEALTH</p> <p>Design implementations with new digital technologies to support improved efficiencies and effectiveness in public health.</p> 	<p>Key</p> <ul style="list-style-type: none">  OPTIMISE THE PREVENTION, DIAGNOSIS, AND TREATMENT OF PRIORITY HEALTH CONDITIONS  SUPPORT UNIVERSAL ACCESS TO HEALTHCARE  IMPROVE HEALTH WORKER EDUCATION AND TRAINING  OPTIMISE HUMAN RESOURCE ALLOCATION AND MANAGEMENT  IMPROVE AND INTEGRATE DISEASE SURVEILLANCE AND RESPONSE  IMPROVE SUPPLY CHAIN EFFICIENCY  ENHANCE PUBLIC HEALTH EDUCATION AND AWARENESS  MONITOR POPULATION HEALTH STATUS

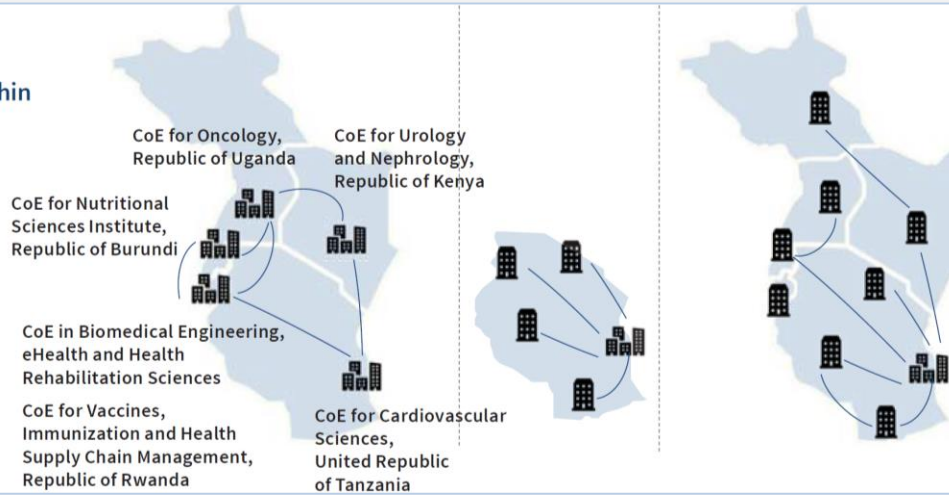
- **HEALTH PROGRAMMES:**
- Spanning all levels of the health sector
- **IMPLEMENTATION OF HEALTH PROGRAMMES Will be prioritized based on:**
- Resources
- Opportunities to demonstrate quick implementation successes
- Ability to mobilise more resource and to secure political support



Quick Win: Regional Telemedicine

- Telemedicine Networks for East African Tertiary (**Telemed NEAT**) Healthcare Services
 - Connect established EAC regional CoE for specialized Healthcare services to provide advanced and specialised healthcare services and continuous medical education to health workers across the region

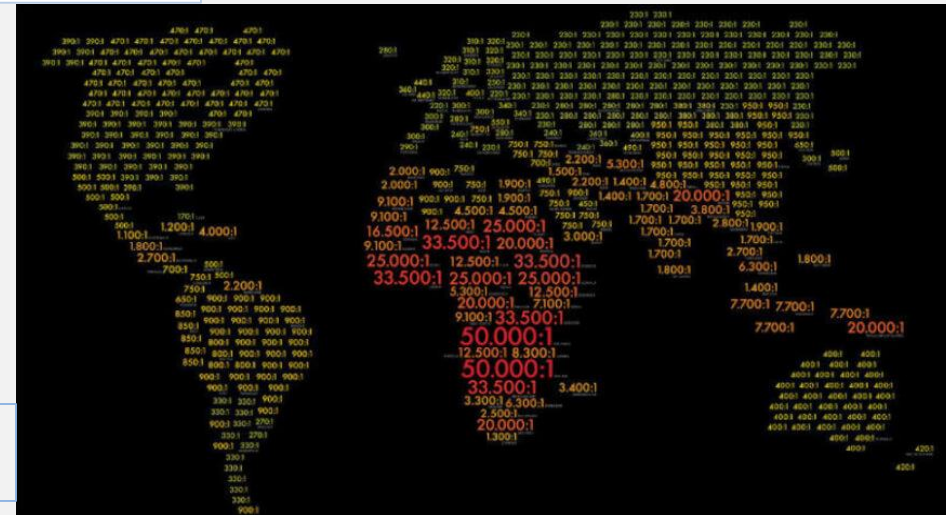
Connecting CoEs across the Region and within Partner States



<https://www.youtube.com/watch?v=XSGhoz8lcag>

<https://www.youtube.com/watch?v=f0bSHEXqjPM>

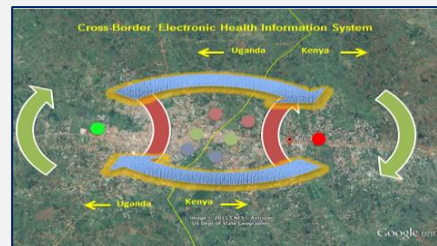
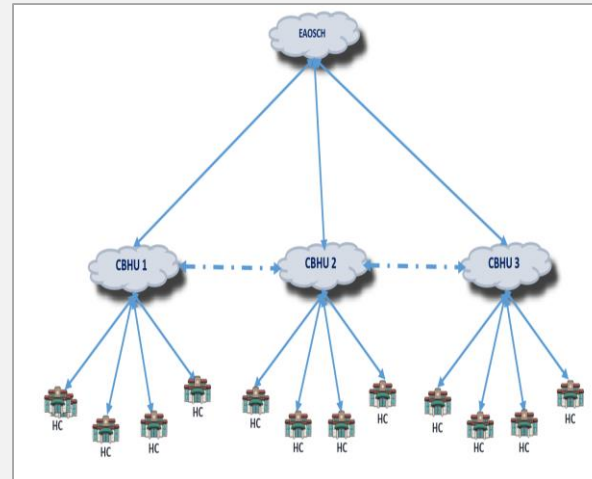
Patients-per-Doctor ratio in Africa versus the rest of the world





Quick Win: East African Health Cloud

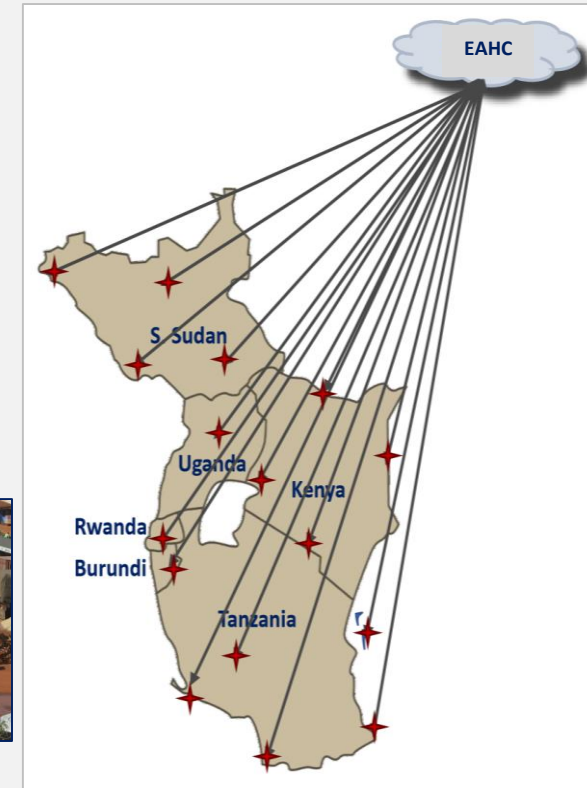
- **REAL-TIME REGIONAL DATA WAREHOUSE** for capturing, storing, retrieving, analysing, and managing national and regional health in East Africa.
- For the seamless **SHARING OF HEALTH DATA** and facilitating the tracking of KPIs
- **REAL-TIME SURVEILLANCE** of health threats, biosecurity, health emergencies, etc.
- **Regional and Local Health Observatory**



GPS border



Real border





Implementation Approach

- Implementation of targeted regional digital health implementations while also creating the supportive foundations that will make those implementations and Partner State programmes successful.
- This is a ground-breaking dimension of this Initiative
- Makes it possible to identify evidence of impact, and to apply evidence to structure and drive work on the enabling environment and subsequent health programmes.

HEALTH PROGRAMMES

The Enabling Environment Workstreams provide the assets required for implementation of health programmes



Health Programmes drive the demand for assets created by Enabling Environment Workstreams using implementation science

Enabling Environment Workstreams

INFRASTRUCTURE

SERVICES AND APPLICATIONS

LEADERSHIP AND ADVOCACY

STRATEGY AND INVESTMENT

LEGISLATION, POLICY, AND COMPLIANCE

WORKFORCE

STANDARDS AND INTER-OPERABILITY



Resource Types and Potential Partners

Resources for the Digital REACH Initiative

- Require a variety of sources
- Both financial and in-kind contributions

Resource Categories	Potential Partners
<ul style="list-style-type: none">▪ Financial contributions (e.g., grants and loans)▪ Technical expertise▪ Political and public support and commitment▪ Civil society buy-in and engagement▪ In-kind and direct financial contributions	<ul style="list-style-type: none">▪ Development Partners▪ For-profit Private Sector▪ NGOs▪ Regional and Partner State Governments▪ Local Health Providers and Civil Society Groups▪ Research Bodies and Universities



Strategic Approach to Resource Mobilisation

- Given the scope and timeline of this initiative it is understood that mobilising the necessary resources for implementation will be an ongoing and collaborative process.
- Some potential approaches for mobilising resources include:

Approach	Examples
Target Phased Funding	<ul style="list-style-type: none">▪ Take a phased approach to funding, starting with support to mobilise resources and set-up the Initiative and discreet, priority activities and quick-wins. This can be followed by funding for short-term and eventually longer-term activities
Leverage Ongoing and Planned Activities	<ul style="list-style-type: none">▪ Partner State commitments (OneHealth, GHSA)▪ Existing development partner activities in the region▪ Development partner principles
Build Fundraising into Initiative Operations	<ul style="list-style-type: none">▪ Allocate resources to support ongoing fundraising for the Initiative▪ Start with implementation of priority activities and use success from quick-wins and evidence generated to secure additional resources
Align with Health Priorities	<ul style="list-style-type: none">▪ Identify and articulate alignment with development partners' and Partner States' health agendas through the course of the Initiative to mobilise resources and tap into existing investments that can be leveraged
Look for Partnerships with the Private Sector	<ul style="list-style-type: none">▪ Identify private sector organisations that have aligned agendas and look for ways to structure PPPs and other partnerships



Financial Resources Required

#	Workstream	Year 1	Year 2	Year 3	Year 4	Year 5	Total
1	Initiative Management	\$2,388,169	\$2,993,217	\$2,997,509	\$3,038,247	\$2,950,551	\$14,367,693
2	Health Programmes	\$2,294,869	\$10,696,936	\$12,682,206	\$25,365,618	\$36,249,356	\$87,288,985
	EAOSCH	\$ —	\$1,125,509	\$2,379,410	\$1,287,368	\$771,777	\$ 5,564,064
	Regional Health Services	\$ 1,500,000	\$2,832,500	\$3,182,700	\$3,824,545	\$2,251,018	\$ 13,590,762
	READSCoR	\$ —	\$1,030,000	\$2,652,250	\$2,185,454	\$ 5,064,790	\$ 10,932,494
	Telemedicine NEAT Healthcare Services	\$ 1,500,000	\$5,407,500	\$3,182,700	\$3,746,493	\$2,894,166	\$ 16,730,858
	EAACH	\$ —	\$1,373,333	\$2,121,800	\$2,185,454	\$5,064,790	\$ 10,745,377
	EAC RHO	\$ —	\$ —	\$ —	\$5,600,226	\$5,064,790	\$ 10,665,016
	Knowledge Management and Peer Learning	\$1,000,000	\$ 2,769,910	\$ 2,499,374	\$ 3,067,515	\$ 2,496,644	\$ 11,833,444
	Regional Technical Assistance for Digital Health	\$ —	\$ —	\$ —	\$983,454	\$2,701,221	\$ 3,684,675
	Innovations in Health	\$ —	\$ —	\$ —	\$ 2,185,454	\$4,502,035	\$ 6,687,489
3	Infrastructure	\$ -	\$ 1,268,431	\$ 2,370,034	\$ 2,793,062	\$ 4,050,790	\$ 10,482,316
4	Services and Applications	\$ 658,050	\$ 3,182,681	\$ 3,117,724	\$ 2,377,825	\$ 2,232,499	\$ 11,568,780
5	Leadership and Advocacy	\$ 594,795	\$ 1,407,166	\$ 2,070,775	\$ 1,901,658	\$ 1,714,390	\$ 7,688,784
6	Strategy and Investment	\$ 1,158,559	\$ 2,186,374	\$ 2,053,602	\$ 2,150,653	\$ 2,091,816	\$ 9,641,004
7	Policy, Legislation, and Compliance	\$ 820,138	\$ 1,985,290	\$ 2,333,351	\$ 2,579,995	\$ 2,535,727	\$ 10,254,501
8	Workforce	\$ 2,503,400	\$ 4,119,531	\$ 3,513,438	\$ 3,411,082	\$ 3,386,344	\$ 16,933,795
9	Standards and Interoperability	\$ 429,784	\$ 1,802,807	\$ 2,242,935	\$ 2,499,781	\$ 2,452,833	\$ 9,428,141
TOTAL		\$ 12,847,764	\$ 34,623,473	\$ 38,254,135	\$ 47,576,748	\$ 53,766,614	\$ 187,068,734



Thank You



EAST AFRICAN HEALTH RESEARCH COMMISSION
An Institution of the East African Community
Research for Health and Prosperity