



DIGITAL REACH INITIATIVE STRATEGIC PLAN 2019-2028

Summary Document

DRAFT



DIGITAL REGIONAL EAST AFRICAN COMMUNITY HEALTH INITIATIVE
TOWARDS A REGIONAL COMMITMENT TO IMPROVE HEALTH OUTCOMES THROUGH DIGITAL TECHNOLOGY





EAST AFRICAN HEALTH RESEARCH COMMISSION
Research for Health and Prosperity

Digital REACH Initiative Strategic Plan 2019 – 2028

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*Professor Gibson Kibiki, MD, MMed, PhD
Executive Secretary – East African
Health Research Commission*

Foreword by Professor Gibson Kibiki, Executive Secretary of the EAHRC

A healthy population is essential for the prosperity of the East African Community (EAC). Sustainable development is built on a productive society that is able to thrive in a healthy region, free of health threats, with equitable and effective care. East African leaders and citizens have shown determination to construct a powerful and sustainable East African regional economic and political bloc that allows free movement of people, services, and goods. Strengthening healthcare provision at all levels of the health system, from national all the way to the regional level, is critical to the health security of the region and to facilitate access to quality healthcare across the region.

Technology is an important part of this vision. There is a clear opportunity for East Africa to utilise digital technologies to advance the health and prosperity of the region and its citizens in ways that are more effective and efficient. While EAC Partner States have each made progress in incorporating technology in their provision of healthcare, there is work to be done so that all EAC countries can reap the rewards.

After a series of strategic planning discussions coordinated by the East African Health Research Commission (EAHRC), the EAC Partner States officially recommended on 22nd February 2018 in Kampala, Uganda that the region harness the potential of digital technology by scaling uptake and utilisation of digital technologies and solutions for improved health service delivery and health outcomes. The recommendation was approved as a health priority for investment by the Heads of the six EAC Partner States during the Joint EAC Heads of the State Retreat on Infrastructure and Health Development on 23rd February 2018 in Kampala, Uganda.

The Digital Regional East African Community Health Initiative (Digital REACH Initiative) is the vision for realising the recommended priority. This strategic plan builds on the Digital REACH Initiative roadmap, which was approved by the ministers of health of the six EAC Partner States during the 15th Ordinary Meeting of the EAC Sectoral Council of Ministers of Health from 13th to 17th November 2017 in Kampala, Uganda. The document details the approach to take this Initiative forward, along with further detail on the activities and implementations that will realise its mission of a strong digital health ecosystem in East Africa.

I would like to thank the representatives of the EAC Partner States, EAHRC Commissioners, EAHRC National Focal Points' experts, health experts, ICT, and e-Health government officials from EAC Partner States, non-governmental organisations, and development partners for their valuable inputs and support to the EAHRC throughout this process. They have been essential to developing this innovative, first-of-its-kind strategy that supports the EAC Integration agenda towards "One People, One Health System" taking a regional perspective in advancing technology for health.

Sincerely,

A handwritten signature in blue ink, appearing to be 'Gibson Kibiki', written in a cursive style.

Professor Gibson Kibiki, MD, MMed, PhD
Executive Secretary – East African Health Research Commission

THE DIGITAL REGIONAL EAST AFRICAN COMMUNITY HEALTH INITIATIVE

A prosperous and healthy region is one in which each EAC Partner State can participate fully in trade and industry within an environment that sustains and nourishes its people, free of health threats and capable of providing universal care to all. Porous borders and the fluid movement of people underscore the need for a regional approach to track and respond to regional health priority needs, while laying the groundwork for a robust and sustainable regional economy. Technology can help to strengthen regional health systems by bolstering the access, use, and performance of health services.

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The Digital Regional East African Community Health (Digital REACH) Initiative will be a new, ground-breaking Initiative within the East African Community (EAC) that will implement regionally-focused, interoperable information and communications technology (ICT) across all dimensions of the health sector in East Africa, while leveraging existing country digital health investments. It has the power to support universal health coverage by improving healthcare delivery across the region, transforming the lives of over 150 million people.

The Initiative has been developed based on collaboration and inputs from representatives of the EAC Partner States and is supported by all Presidents of the EAC, specifically the Republic of Burundi, the Republic of Kenya, the Republic of Rwanda, the Republic of South Sudan, the United Republic of Tanzania, and the Republic of Uganda.

Each of the Digital REACH workstreams described in this document support the EAC's integration agenda of "One People, One Health System". This support of regional integration is what makes the Digital REACH Initiative unique and is why it has received the highest levels of political support in the EAC region.

CALL TO ACTION: SUPPORTING THE DIGITAL REACH INITIATIVE AND WHY IT MATTERS NOW

ICT adoption amongst all health stakeholders – from patients to health ministers – has occurred so quickly and thoroughly that the term *digital health* is losing its novelty. This signals its maturity and the need for coordination across the ecosystem, moving away from a fragmented approach to digital health – characterised by siloed applications, waste, and variable data – to a holistic digital health model with coordinated investments and common assets leveraged across multiple health programmes. Strong leadership, the right supportive, enabling environment, and alignment with the new Principles of Donor Alignment for Digital Health can propel this model to reality, preventing duplication of effort across the region and generating large-scale cost efficiencies.

The EAC has the opportunity to play a major role in creating and supporting the enabling environment for digital health and in the design and use of digital health implementations, to ensure sustainability and scale across the region. The purpose of the Digital REACH Initiative is to harness this opportunity through coordinated regional action.

PURPOSE OF STRATEGIC PLAN

Created and owned by the EAC, this Strategic Plan presents a ten-year plan for implementing the Digital REACH Initiative. It follows the EAC President's approval of the [Digital REACH Roadmap](#) and presents common regional vision and strategic approach for regional collaboration in health and serves as a platform for development partners' and private-sector input to support coordination and shared investment. The plan will allow the EAC to pursue the funding necessary to launch the Initiative and plan for full-scale operations by early 2019.

This is the first time an African Union region has come together to create an ambitious and coordinated approach to digital health that is prioritised for investment by all Presidents of the EAC Partner States.

VISION AND MISSION

The Digital REACH Initiative is guided by the following vision and 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.

DIGITAL REACH INITIATIVE OUTCOME GOALS

The specific outcome goals of the Digital REACH Initiative are listed below. These have been identified by EAC Partner State representatives through a series of workshops in 2017 and 2018.



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

Improve quality, access, and continuity of care across EAC countries for communicable and non-communicable diseases.



Improve Health Worker Education and Training

Provide standardised and recognised healthcare training and capacity building for pre and in-service health workers.



Improve Supply Chain Efficiency

Take advantage of economies of scale for dealing with suppliers and vendors that impact the region.



Enhance Public Health Education and Awareness

Improve and support community health-related knowledge and provide patient education for preventive care, and behavior change.



Support Universal Access to Healthcare

Facilitate the portability of health insurance in the region.



Improve and Integrate Disease Surveillance and Response

Build capacity and improve regional disease surveillance to prevent, detect, and respond to infectious diseases, emergencies, and outbreaks.



Optimise Human Resource Allocation and Management

Optimize health worker mobilisation and facilitate healthworker knowledge sharing across the regions.

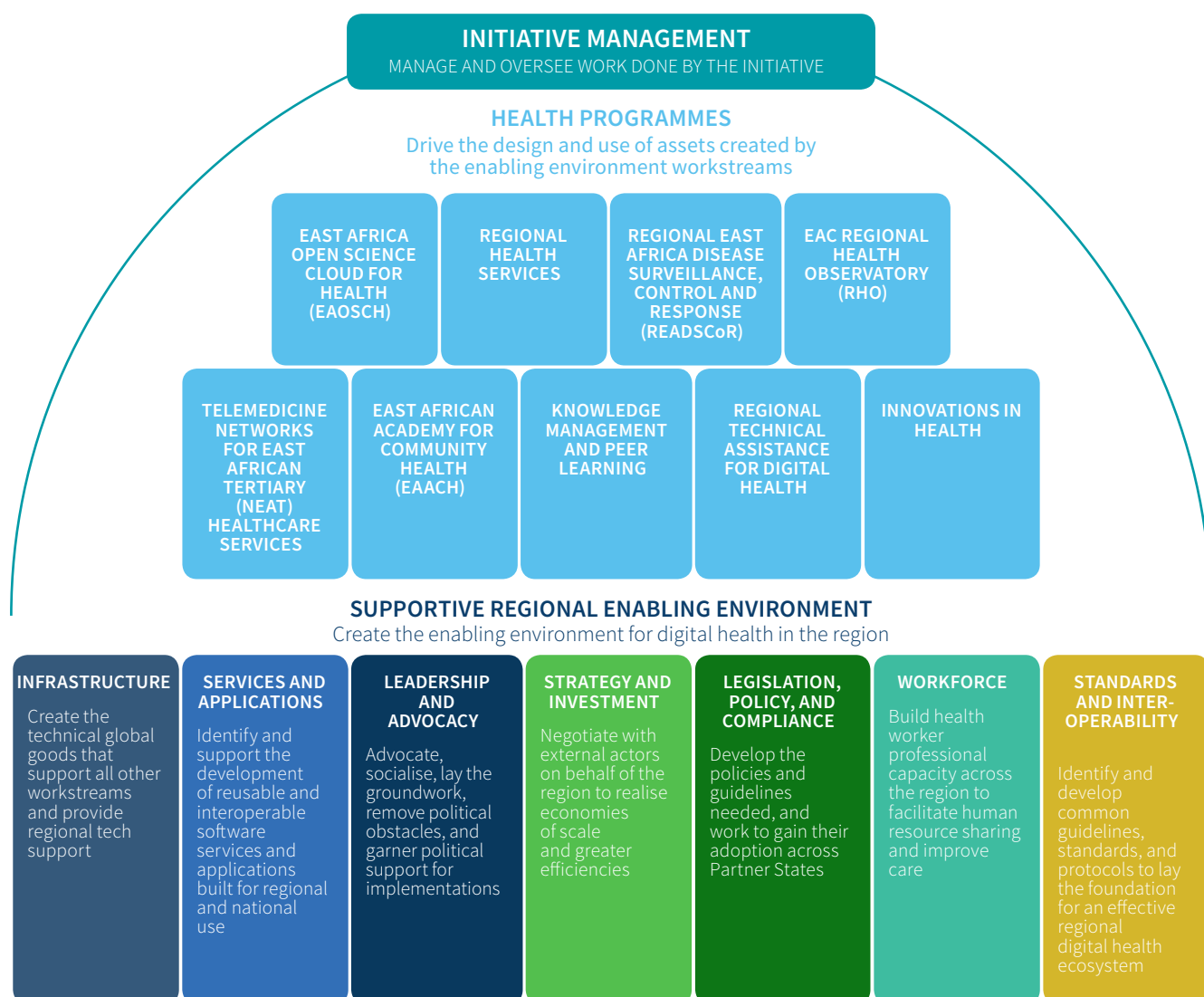


Monitor Population Health Status

Track regional priority health indicators and promote use of health research to support health policies and further health agenda.

DIGITAL REACH INITIATIVE WORKSTREAMS

The Initiative has been structured into nine workstreams. They will run in parallel and support one another, starting with select priority activities and expanding into other areas of work as gains are made and resources become available. Implementation of workstreams will be staggered in line with these priorities. The Health Programmes Workstream will focus on the implementation of specific, strategic health programmes, while the seven Enabling Environment Workstreams will focus on the creation of an enabling environment for digital health that can be shared across Partner States and that supports health programme implementations. An overarching workstream for Initiative Management will lead and manage the Initiative. A summary of the different workstreams can be found below.



Much investment has already been made across a number of these workstreams by Partner States and development partners. An early scan of what already exists across the EAC region will be carried out once each workstream is set up to build on and support existing initiatives and learn from previous implementations.

IMPLEMENTATION APPROACH

A key differentiator of the Digital REACH Initiative is that it takes an evidence-based approach, implementing targeted regional digital health programmes while also creating the supportive foundations that will make those programmes successful. This is a ground-breaking dimension of this Initiative. It makes it possible to not only identify evidence of impact, but also to apply that evidence in a way that structures and drives work on the enabling environment and subsequent health programme implementations.

The section below provides an overview of the different workstreams and the identified priority activities for each, selected based on input from EAC and Partner States, which includes the feasibility and potential impact of implementation, the critical dependencies of these activities to other areas of works, and the importance of striking a balance between building foundations and establishing quick-wins towards progress and impact.

WORKSTREAM 1: INITIATIVE MANAGEMENT

Workstream 1, the Initiative Management workstream, will holistically guide, coordinate, and maximise the impact of the other eight Initiative workstreams. It aims to **provide strategic organisational direction across the entire Initiative, create operational efficiencies, drive awareness of the Initiative through unified messaging and public relations, and ensure compliance with regulations and grant requirements.** It will coordinate across all other workstreams, making sure all are working towards the achievement of the vision and mission of the Initiative.

The PMO will reside in this workstream and will be the centralised management organisation of the Digital REACH Initiative, providing leadership and coordination across all other workstreams. The full Strategic Plan below explains in further detail how this will be set up and managed. Example activities include:

PRIORITY ACTIVITIES

- 1.1 Set up the appropriate entity and structures to lead and manage the Initiative and provide ongoing operational support across workstreams
- 1.2 Provide leadership across all workstreams and encourage cross-workstream synergies
- 1.3 Assist other workstreams with hiring and training staff (legal support, human resources)
- 1.4 Manage grants and communications with grant partners for the Initiative
- 1.5 Coordinate amongst existing partners in the public and private sector and pursue new partnerships throughout the lifespan of the Initiative
- 1.6 Set up routine processes to report out on progress and financing of current activities and prioritise future workstream activities with EAC leadership and the Technical Advisory Group annually
- 1.7 Conduct M&E, thought leadership, and performance management across all workstreams
- 1.8 Share and duplicate best practices among Partner States and other regional organisations

DIGITAL REACH INITIATIVE MANAGEMENT WORKSTREAM

CENTRAL MANAGEMENT HUB (CMH)

Board of Directors

(Partner States, EAC, Development Partners, and the Private Sector)

Digital REACH Initiative PMO

(Executive Director and the Digital REACH Directorate)

PARTNERS' FORUM

(Partner States, EAC Secretariat, ESTECO, IUCEA, development partners, and the private sector)

TECHNICAL ADVISORY GROUP

(Local and international health and technology experts)

Oversight Across All Other Workstreams

Workstreams will have their own Workstream Lead, teams, management structure, and budget and report to the PMO. Workstream-specific partnerships will be managed at the workstream level

HEALTH PROGRAMMES

INFRASTRUCTURE

SERVICES AND APPLICATIONS

LEADERSHIP AND ADVOCACY

STRATEGY AND INVESTMENT

LEGISLATION, POLICY, AND COMPLIANCE

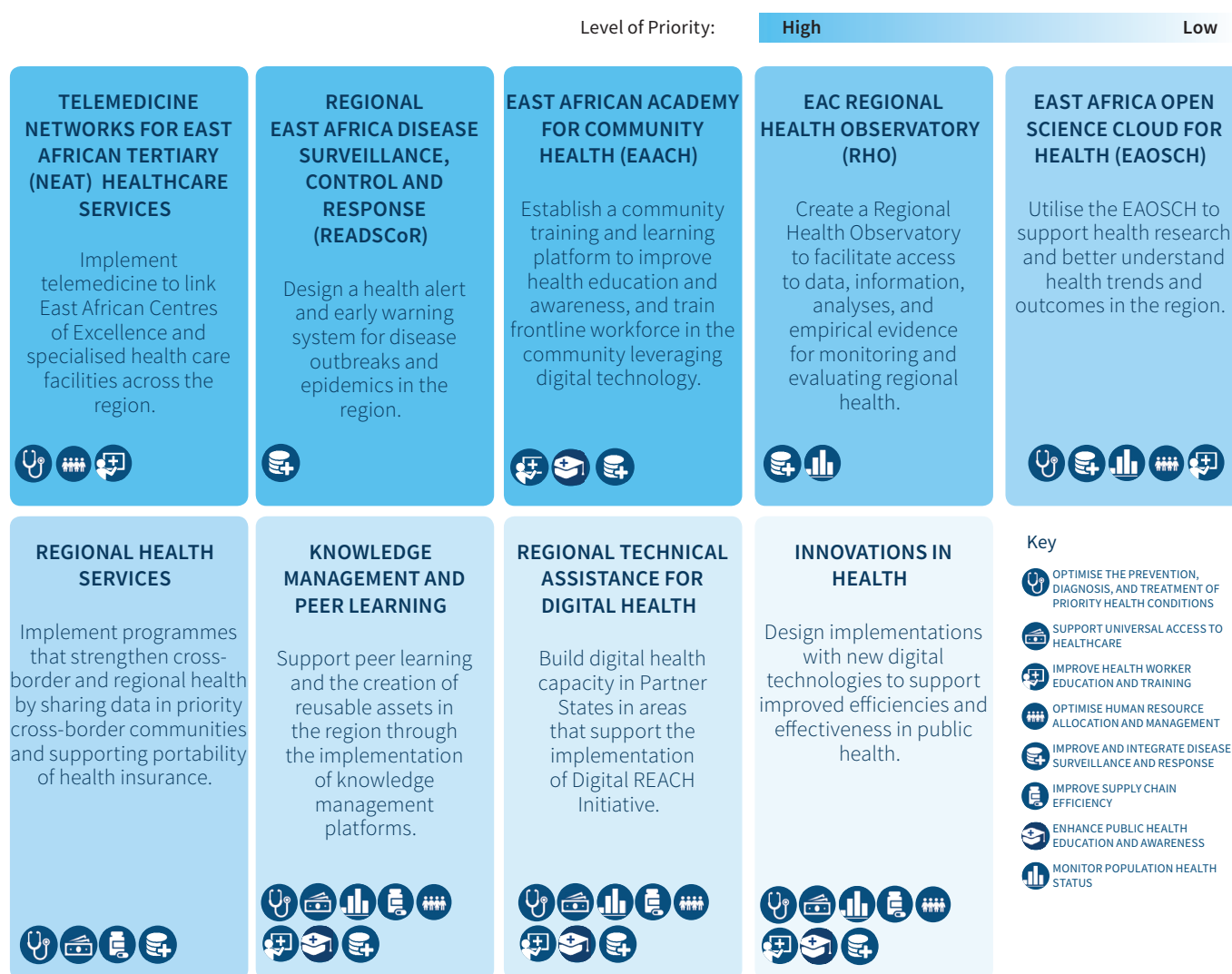
WORKFORCE

STANDARDS AND INTER-OPERABILITY

WORKSTREAM 2: HEALTH PROGRAMMES

The Health Programmes Workstream will focus on improving healthcare in the EAC through specific regional digital health implementation services. Over the course of the Initiative this workstream will **oversee and implement nine health programmes**, as detailed below. Not all implementations will start at once; some have been identified as priorities by the EAC, while others will be started once the Initiative is underway and resources are available.

The Health Programmes workstream provides implementation oversight, M&E, and coordination across all Health Programmes implemented in this workstream.



Workstream 3 - 9: Creating an Enabling Environment

One of the major roles the Digital REACH Initiative will play in the region is to create and support the enabling environment for digital health, to ensure sustainability and scale. An enabling environment can also facilitate entry of the private sector and development partners for the provision of sustainable digital health systems and services. Part of the Digital REACH Initiative strategy is to create an ecosystem that is attractive to large companies as well as small, local entrepreneurs so that digital health can grow as an industry. It will do this by:

- Directly engaging and partnering with the private sector to implement workstream activities (e.g., through PPPs)
- Creating an enabling environment that will attract and stimulate investment in the region (e.g., through supportive regulatory framework and policies)

Workstreams 3 – 9 will work to create this enabling environment. Each workstream will play a key role in stimulating private sector investment. The Strategy and Investment workstream will lead the overall

engagement of the private sector but it will be the responsibility of each workstream to identify areas where the private sector can be brought in and engaged to support their activities.

WORKSTREAM 3: INFRASTRUCTURE

The overall goal of this workstream is to **identify, build, host, and implement common technological components** and systems that will allow other workstreams and health programmes to achieve the Digital REACH Initiative's outcome goals. This workstream also includes the technical support required to maintain systems over time. Priority activities are:

PRIORITY ACTIVITIES

- 3.1 Build the East African Open Science Cloud for Health (EAOSCH) cloud and set up a regional support team to maintain it over time to enable real-time storing, capturing, analysing, and retrieving of health data on priority diseases and outbreaks, and to support health research
- 3.2 Select and implement foundational technologies to enable regional information exchange (e.g., between EAOSCH and other regional and Partner State HIS) including a client registry, terminology services, and interoperability layer

WORKSTREAM 4: SERVICES AND APPLICATIONS

This workstream will identify and invest in **reusable and interoperable digital solutions for regional and national use** that support the realisation of Digital REACH Initiative goals. It will support the access, exchange, and management of data and content for the EAC region through specific service offerings and software tools, identifying gaps in existing solutions and investing in common goods to address those gaps.. Users include the general public, patients, and health and insurance providers. Services can be provided by the government or the private sector (e.g., software as a service, data analysis). Applications typically include point-of-care systems used by health staff to deliver care. Priority activities are:

PRIORITY ACTIVITIES

- 4.1 Develop decision-support tools built into new or existing systems to support health workers dealing with cases of outbreaks and health emergencies (e.g., outbreak alerts, an alert to notify the regional body, care instruction, alerts with updates to protocols)
- 4.2 Support and promote implementation of interoperable unique ID systems in priority cross-border areas
- 4.3 Support engagement with the relevant OpenHIE and other global communities to leverage best practices and external expertise in the design and implementation of digital health services and applications
- 4.4 Invest in software solutions that support the realisation of a regional digital portable health insurance product (e.g., claim submission, eligibility verification, mobile payments for reimbursements)
- 4.5 Provide support with contractual agreements with technology solutions vendors for Partner States and the Digital REACH Initiative and work with Strategy and Investment team for potential group pricing discounts

WORKSTREAM 5: LEADERSHIP AND ADVOCACY

Achieving the Digital REACH Initiative outcome goals will often require substantial change management. The Leadership and Advocacy workstream will **assist other workstreams to gain political support for their activities**, which is a necessary first step to facilitate such change.

This workstream will be outward facing. Ambassadors (individuals with deep expertise and connections in the region) will interact with senior elected officials and government decision makers on behalf of the Digital REACH Initiative. In so doing, it will collect high-level feedback and rally support from key government decision makers and elected officials for the Initiative's projects. Such support will greatly facilitate the participation of government officials and others in the changes being introduced through the Initiative's projects. Priority activities are:

PRIORITY ACTIVITIES

- 5.1 Advocate for agreement on data sharing and storage in a regional cloud
- 5.2 Advocate for regional agreement on health insurance portability for all EAC citizens
- 5.3 Advocate for a joint regional position on approach to public health emergencies to improve the efficiency and effectiveness of response in the event of a disease outbreak
- 5.4 Advocate with development partners for reduced common set of priority reporting health indicators across all EAC Partner States to reduce data collection and reporting burden on health workers

WORKSTREAM 6: STRATEGY AND INVESTMENT

This workstream will make use of skilled business analysts and negotiators to **develop the business cases** that will be used to engage with the private sector and the development community on behalf of the EAC in order **to realise economies of scale and greater efficiencies**.

This workstream will also work to engage with the private sector to develop an investment mechanism to expand communication infrastructure in areas with low connectivity and to negotiate and structure public-private partnerships (PPPs) that can be utilised across the Initiative. Priority activities are:

PRIORITY ACTIVITIES

- 6.1 Conduct feasibility assessment, develop business case, and identify opportunity for public private partnerships (PPPs) for the build and maintenance of the EAOSCH and NEAT
- 6.2 Conduct business case assessments and use for negotiating agreements with mobile network operators (MNOs) for affordable bandwidth and improved network connectivity to support priority health programmes (starting with cross-border health facilities)
- 6.3 Support the development of a business case for regional insurance, partnering with private health insurers for favourable premium rates and packages
- 6.4 Aggregate demand based on Partner States' supply needs and develop a business case to support negotiation for reduced pricing with suppliers to reduce cost of healthcare for providers and patients

WORKSTREAM 7: LEGISLATION, POLICY, AND COMPLIANCE

Critical to the success of the Digital REACH Initiative will be the ability to put into place conducive regional policies that are embraced by Partner States. This workstream acts as the regional facilitator that works in the service of **creating a policy environment to promote digital health** on behalf of EAC Partner States.

The ability to work effectively with policy officials in Partner States is key. To do so, this workstream will form a Regional Policy Expert Working Group (EWG) made up of subject-matter experts and policy officials from Partner States, who will act together to scope and review policies and legislation drawn up by the workstream. Priority activities are:

PRIORITY ACTIVITIES

- 7.1 Design policy and legislation around remote data hosting (including data privacy and confidentiality standards and requirements)
- 7.2 Develop policy and legislation to support data sharing in cases of disease outbreaks and telemedicine to allow patients to benefit from continuity of care and improved health security and surveillance across the region
- 7.3 Establish a policy for managing public health emergencies (e.g., how to drive commitment of Partner States to mobilise resource in emergencies) to ensure efficiency and effectiveness of a regional response
- 7.4 Develop a shared policy that supports portability of health insurance to allow EAC citizens to access a regional insurance product
- 7.5 Develop a standardised policy and process for obtaining informed consent, support services providers in implementation, and monitor adherence

WORKSTREAM 8: WORKFORCE

The overall goal of this workstream is to **build the capacity of health workers in the region** to facilitate human resource sharing across countries, strengthen patient care and outcomes, and overcome shortages of skilled health workers. The workstream will work in close collaboration with professional bodies and educational institutions and work within existing regional frameworks (e.g., East African Qualifications Framework for Higher Education) and forums. The workstream will ideally be an eLearning partner, not a new training institution in East Africa. Its work will include a coordinated review of existing digital health training in the region and the harmonisation across Partner States of minimum standards in teaching curricula, which include the use of digital tools and ICT as well as data sharing and security. Priority activities are:

PRIORITY ACTIVITIES

- 8.1 Work with universities and training institutions to harmonise and make available eLearning course content and Massive Open Online Courses (MOOCs) for in-service and pre-service health professionals that can be shared within the East African region using an eLearning platform
- 8.2 Work with universities, training institutions, and global and regional partners to harmonise curricula for digital health and telehealth curricula for healthcare professionals and health IT professionals
- 8.3 Work with universities to embed digital health learning methods in medical and healthcare worker training programmes to promote independent, student-centred learning

WORKSTREAM 9: STANDARDS AND INTEROPERABILITY

This workstream will **identify and develop common guidelines, standards, and protocols** to lay the foundation for an **effective and interoperable regional digital health ecosystem** in East Africa. The workstream sets common and shared standards, while adhering to the Principles for Digital Development and working through existing global and regional efforts, to enable the realisation of the Digital REACH Initiative outcome goals. This effort includes developing and promoting regional principles that promote access to healthcare services and interoperability across the EAC region.

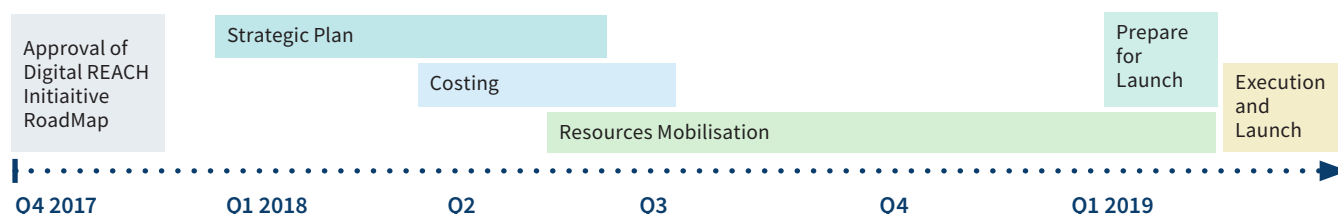
The workstream will form and be guided by a Standards and Interoperability EWG that is made up of workstream subject matter experts and Partner State officials acting together to scope and review standards developed by the workstream. The EWG will also play a compliance role, in that it will review Partner State progress with implementation of agreed-upon standards. Priority activities are:

PRIORITY ACTIVITIES

- 9.1 Develop data sharing, security, and management guidelines, protocols, and standards for telemedicine and at cross-border health units (CBHUs) to ensure that patients and their histories remain at the centre of care regardless of location
- 9.2 Create a regional data dictionary, mapped to international standards, and supporting governance process, to support interoperable data exchange between Partner State HIS in the region (e.g., for insurance providers to allow EAC citizens to file claims, to exchange patient records between cross-border health facilities, and to define data stored in the EAOSCH to enable research and discovery by researchers)
- 9.3 Support and promote the exchange of unique IDs and patient health records across borders to support effective care delivery for portability of health insurance and continuity of care
- 9.4 Develop data exchange standards for doing claim submission, eligibility verification, and reimbursements
- 9.5 Provide guidelines for diagnosis, treatment, and standards of care to facilitate continuity and quality of care across the region

THE PATH FORWARD

The purpose of the strategic plan is to 1) inform implementation plans for each workstream and support foundational decisions that need to be made for each one, including the selection of appropriate partners, and 2) support resource mobilisation with potential partners and funders. The long-term success of the Digital REACH Initiative will rely on the availability and support of varied resources. 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. Good partnership requires an open mind among governments, development partners, and the private sector alike, and it is in this spirit that resource mobilisation for Digital REACH will be conducted. It is expected to be an iterative process, that will require the identification of complementary priorities with potential partners. These materials provide the EAC and Partner States with the materials to mobilise the resources necessary to launch the Digital REACH Initiative in early 2019.



PARTNERSHIPS AND RESOURCE MOBILISATION

Engagement with a range of stakeholders is critical for the success of the Digital REACH Initiative. A multi-stakeholder engagement approach will ensure that critical international expertise is utilised and that the Initiative is structured in a way that ensures sustainability from the start. Priority will be given to partners who recognise the importance of putting local expertise at the forefront and addressing gaps in the region through knowledge transfer and capacity building, rather than providing long-term continuous support.

The figure below depicts some of the ways each sector can contribute to Digital REACH Initiative activities and the value they will derive from participation.

CHARACTERISATION OF DIGITAL REACH INITIATIVE PARTICIPATION BY SECTOR			
DEVELOPMENT PARTNERS Support in the areas that align with their own agenda and goals through direct funding (e.g., grants, local or private-sector loss guarantees) and in-kind support (e.g., technical assistance, participation in advisory bodies, support with advocacy efforts)	FOR-PROFIT PRIVATE SECTOR Support in areas that support their business models through direct funding (e.g., grants or equity investment) and in-kind support (e.g., provision of airtime by MNOs, reduced or highly subsidised pricing, software licences, participation in PPPs and advisory bodies)	REGIONAL AND PARTNER STATE GOVERNMENTS Support in areas that support national or regional health agendas through various methods, (e.g., political support, in-kind support technical assistance, participation in advisory bodies, support with advocacy efforts)	
LOCAL SERVICE PROVIDERS AND CIVIL SOCIETY GROUPS Support in the areas that align with their own agenda and goals through in-kind support (e.g., technical assistance, participation in advisory bodies, support with advocacy efforts)		RESEARCH BODIES AND UNIVERSITIES Support in areas that support knowledge exchange through in-kind support (e.g., research support, participation in advisory bodies, support with advocacy efforts)	

CONCLUSION

Created and owned by the EAC, this is the first time an African Union region has come together to create an ambitious and coordinated approach to digital health that is prioritised for investment by all Presidents of the EAC Partner States. A successful implementation of the Digital REACH Initiative will fully support the EAC's