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# **EHealth and Mobile Strategies in Kenya**

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**31<sup>st</sup> October 2019**

# OUTLINE OF PRESENTATION

- ◆ Introduction
- ◆ The status of eHealth and mHealth in Kenya
- ◆ Enabling environment for eHealth and mHealth
- ◆ Common challenges of eHealth and mHealth
- ◆ Conclusion



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# INTRODUCTION

- ◆ Advanced ICT has affected the way people work, live and play
- ◆ Innovations around Internet and communicative use of IT are revolutionizing health systems
- ◆ Kenya is among the top countries in Africa taking advantage of these developments
- ◆ This presentation shows the opportunities and challenges for adoption of eHealth and mHealth approaches

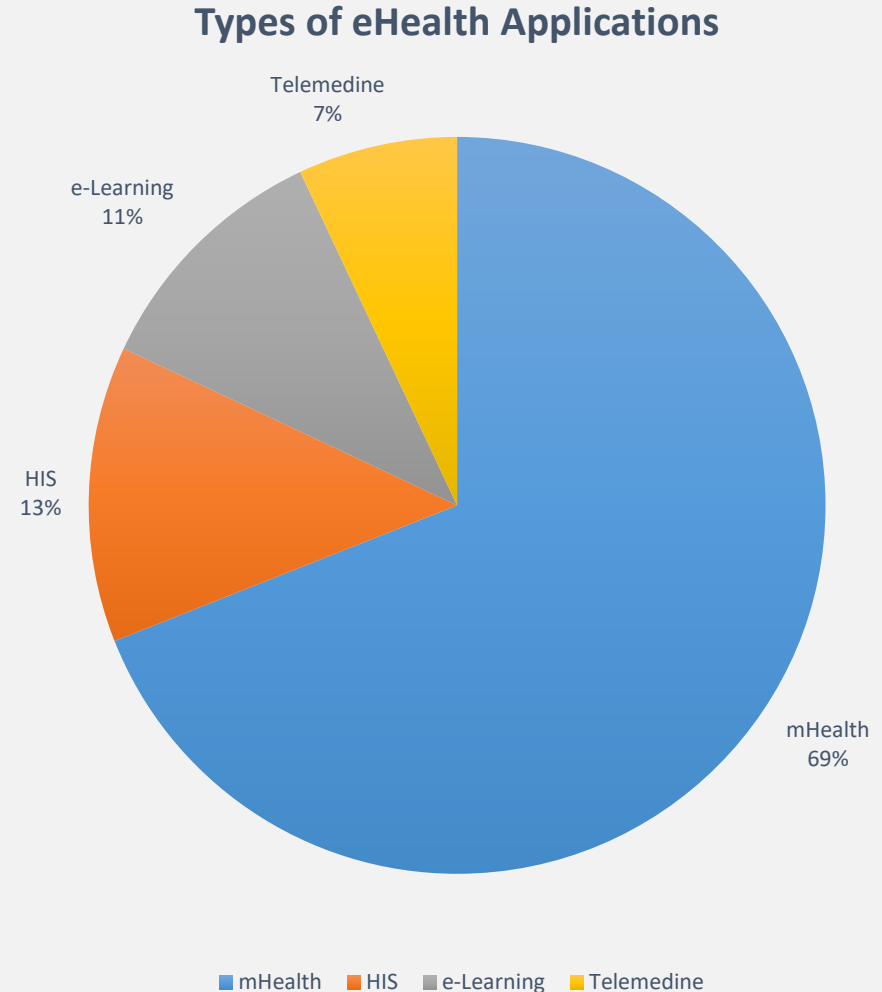


# INTRODUCING THE CONCEPT OF EHEALTH

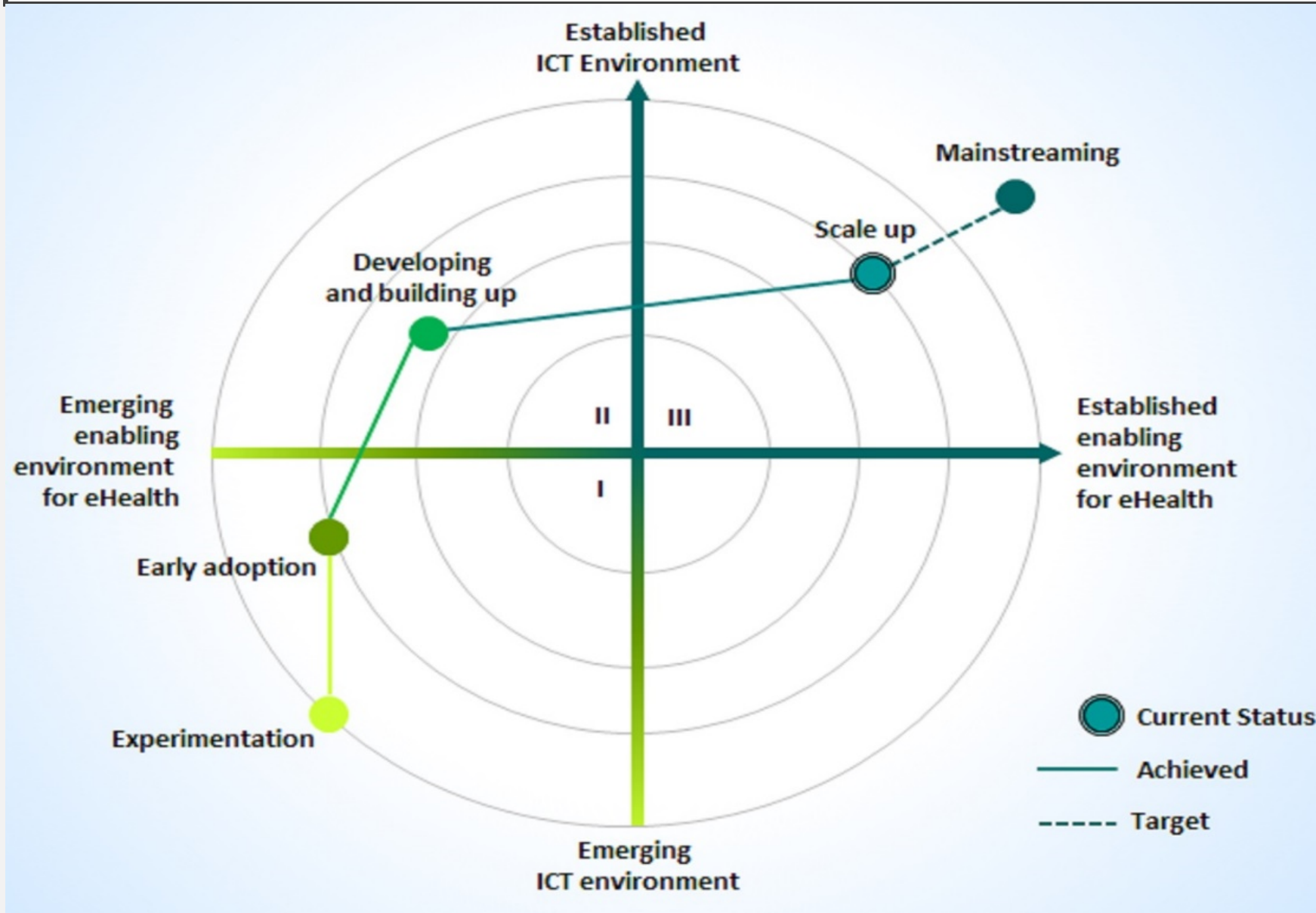
- ◆ There is no one single definition of the term e-Health
- ◆ Scholars define it using different concepts-health, technology etc.
- ◆ Alvarez (2002) defines e-Health as “the use of emerging ICT, especially the Internet, to improve or enable healthcare”
- ◆ E-Health is a key enabler for health systems globally

# EHEALTH SOLUTIONS IN KENYA

- ◆ Kenya adopted various eHealth solutions:
- ◆ Telemedicine, Health Information Systems (HIS), mHealth and e-Learning
- ◆ Most are on Primary health care and HIV/AIDS
- Ref: (*Njoroge et al., 2017*)



# STATUS OF THE EHEALTH IN KENYA



Source: Draft Kenya eHealth strategy 2018-2023

## ENABLING ENVIRONMENT FOR KENYA'S EHEALTH:

- ◆ Political goodwill to support healthcare reforms and innovation
- ◆ Availability of highly skilled health personnel
- ◆ Availability of advanced health facilities and referral systems carrying out complex eHealth medical procedures
- ◆ High level of awareness of ICT among the general population
- ◆ Awareness of the existing of eHealth technologies among healthcare workers
- ◆ High uptake of IT and mobile technology in the country

## **ENABLING ENVIRONMENT FOR KENYA'S EHEALTH:**

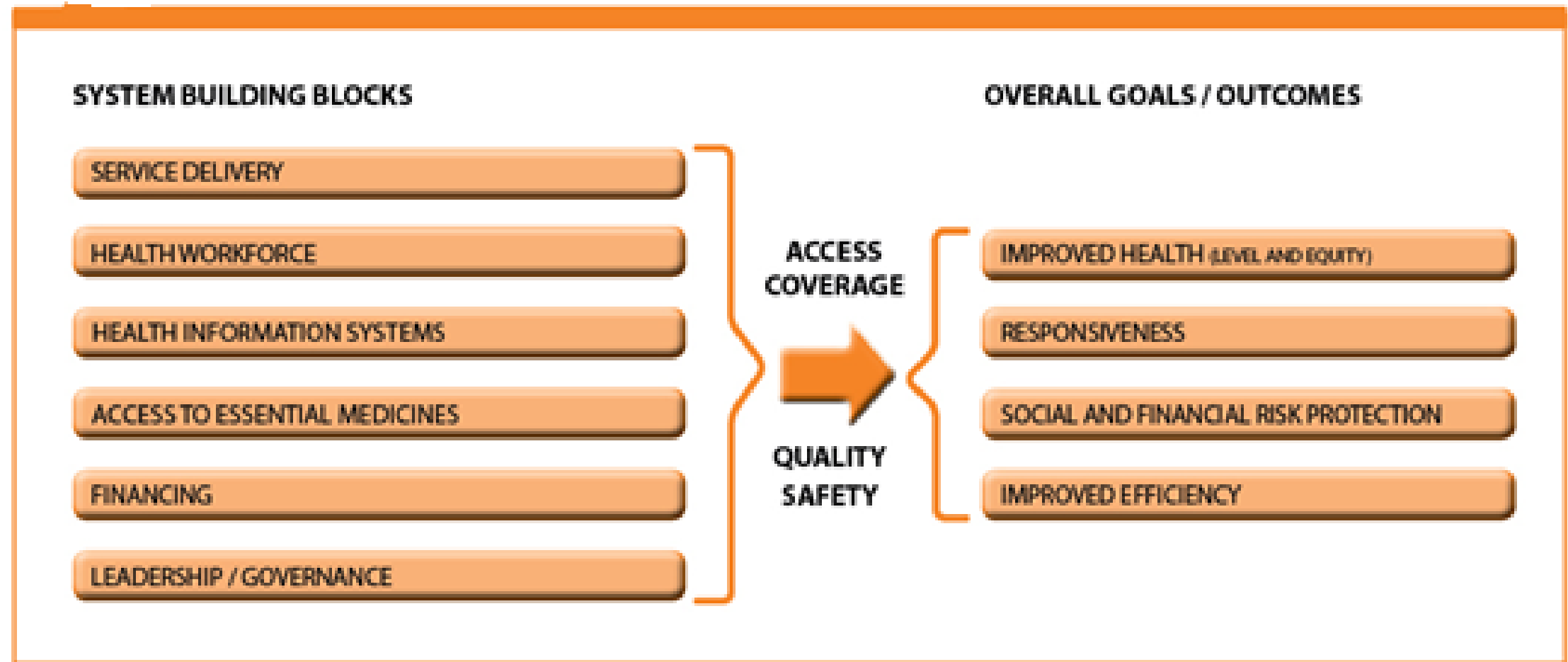
- ◆ Alternative sources of electrical power – solar, geothermal
- ◆ National ICT policy promoting use of ICT in public service
- ◆ Recognition of eHealth as a mode of service delivery by the Kenya Health Act 2015
- ◆ National e-Government Strategy and Vision 2030 recognizes eHealth as a national priority
- ◆ Existence of National eHealth policy and strategy
- ◆ Availability of robust national reporting systems

# IMPLEMENTATION OF KENYA'S EHEALTH STRATEGY

- ◆ The current vision eHealth Strategy:
  - ◆ Affordable, efficient, sustainable and quality digital health solutions that support Universal Health Coverage (UHC)
  - ◆ Drafting of the strategy adopted stakeholder involvement
  - ◆ The vision can be achieved by utilizing technology in the six pillars of health systems (WHO)



# THE SIX BUILDING BLOCKS FOR HEALTH SYSTEMS.



## EXAMPLES OF EHEALTH BASED ON PILLARS OF HS:

- ◆ Leadership and Governance: Timely data from eHealth to support decision making
- ◆ Finance: Interlinking healthcare service providers to the payers like the National Health Insurance Fund
- ◆ Essential medicines: Managing the supply chain efficiently
- ◆ Health workforce: e-learning platforms and a database for workers(HRIS)
- ◆ Service delivery: digital health solutions such as telemedicine, DHIS2 , Master facility lists, EHR, EMR, mobile solutions to enhance patient – provider interaction.



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# USE OF DATA, PROTECTION OF DATA

# SPECIFIC POLICY ON PROTECTION OF DATA

Policy/strategy	Key Functions
The Constitution of Kenya, 2010	Right to information
Kenya National eHealth Policy 2016 – 2030	Adopt user-friendly eHealth platforms for clinical and public health
Health Information System Policy 2010-2030	Enforce security mechanisms for collection, storage and dissemination of health data
Health Sector Strategic Plan for Health Information Systems 2009-2014	Data must be handled with confidentiality and security that they deserve

# SPECIFIC POLICY ON PROTECTION OF DATA

Policy/strategy	Key Functions
Kenya Health Policy 2014-2030	Develop appropriate system (accessible, affordable, acceptable to the community)
Health Sector ICT Standards and Guidelines- Ministry of Health June 2013	Adhere to cloud computing guidelines-build secure infrastructures offering confidential data protection
Kenya National eHealth Strategy 2011-2017	Protect patient confidentiality and restrict access to authorized persons
Kenya Standards and Guidelines on mHealth Systems April 2017	mHealth platforms have to conform to security, confidentiality and non-repudiation



## COMMON CHALLENGES OF EHEALTH SOLUTIONS

- ◆ The exciting eHealth solutions present new challenges
- ◆ Choice of technologies
- ◆ Up-front investment
- ◆ Acceptable standards
- ◆ Existence of multiple disparate systems with Limited capability to exchange health information
- ◆ Weak regulatory frameworks
- ◆ Possible violation of patients' privacy and confidentiality



## COMMON CHALLENGES OF EHEALTH SOLUTIONS

- ◆ Training in eHealth skills not integrated in medical schools
- ◆ Inequitable distribution of staff in the Public Health Sector
- ◆ Multiple data collection tools affecting routine reporting systems
- ◆ Inadequate coordination between the two levels of government in implementation of policy and guideline documents-
- ◆ Possible conflict since eHealth has centralizing tendencies in a decentralized government



## COMMON CHALLENGES OF EHEALTH SOLUTIONS

- ◆ **Connectivity:** The strength of Internet connectivity varies widely in Kenya. Some regions also have less access to electricity and mobile telephony –
- ◆ **Capacity:** The capacity to use ICTs effectively is a challenge. A skilled ICT work force is inadequate
- ◆ **Stakeholders:** Taking care of all stakeholders' needs in the system risks overloading it
- ◆ **Capital:** While the projects are heavily donor funded, there may be need to find ways to blend private and public resources for sustainability



## CONCLUSION

- ◆ Kenya made a bold move to adopt eHealth , and mHealth solutions, suggesting that if well managed, they can improve health care in Africa
- ◆ It is however important that capacity building, relevant infrastructure and staffing levels be evaluated for the systems to work well



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***THANK YOU!***