



# Implementing eHealth: The Nigerian Experience

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# Outline

- Defination
- Implementation of eHealth in Nigeria
- Some of the eHealth initiatives
- Implications for the Cloud
- Drivers for Cloud Computing in eHealth
- Impact of the Cloud on eHealth
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# Defination

- eHealth: the use of ICT for Health
- ICT provide opportunities for individuals, healthcare providers and administrators to
  - **obtain information,**
  - **communicate with professionals,**
  - **deliver first-line support especially where distance is a critical factor and**
  - **promote preventive medicine programmes**

# Implementing eHealth in Nigeria so far

## Approach

- Piecemeal, uncoordinated
- Largely pilots yet to be scaled up
- No comprehensive eHealth national strategy developed yet.
- Efforts made to develop eHealth in Nigeria
  - Efforts to develop telemedicine and eHealth in Nigeria started in 1994.
  - Department of Planning, Research and Statistics/FMOH tried to produce necessary documents for eHealth development and deployment in 1996.
  - FGN first showed commitment to the use of ICT to deliver health services as explained in the NEEDS document( eHealth seen as a component of eGovernment)

# Some of the eHealth initiatives

- A pilot project initiated by National eGovernment Strategies Ltd in 2006 to provide teleconsulting in cardiology with the use of video conferencing equipment and digitalized electrocardiography machine to Abuja communities.
- A pilot project initiated by the National Space Research and Development Agency (NASRDA) in collaboration with FMOH in 2007 through provision of services by tertiary in
  - India Pan African eHealth Network project at the Universities of Ibadan and Lagos Teaching Hospitals to help provide trans-border teleconsultation and training of workforce.
  - Intel telemedicine/eHealth project between Federal Medical Centre, Bida, and the National Hospital, Abuja, for critical pediatric care as well as surgical cases.
  - FCT eHealth pilot (the FCT eHealth web Portal Initiative) – an online portal that seeks to manage patient data/statistics and to close any existing gap between primary and secondary health systems by linking data across health facilities.
  - mHealth project with the National Primary Health Care Development Agency (NPHCDA) used in the Midwives Service Scheme(MSS).
  - Mobile Community Based Surveillance (mCBS) project designed to give traditional birth attendants the ability to report vital MCH events in real time using mobile phones. stitutions – mobile health unit set up to shuttle across 8 states for a period of 2 months

# Some of the eHealth initiatives

- UNICEF supported an mHealth initiative which involves the implementation of Rapid SMS to track the supply of malaria bed nets as well as using Rapid SMS to pilot a child nutrition monitoring system
- Made in Nigeria Primary Health Care and Hospital Information System (MINPHIS) application that keeps patient records and generates various reports for health management and research purposes.
- Adoption of District Health Information System (DHIS) as a national tool for reporting aggregate data from the lowest to the highest level.
- Establishment of a national eHealth data/documentation centre to provide central coordination for national health data/information warehousing and management and hosting databases for all health programmes of FMOH.
- Lagos State Government's implementation of eHealth in 13 General Hospitals in the state enabling the hospitals to practise health care system supported by electronic processes and telecommunications technology.

# Lessons learnt from implementation

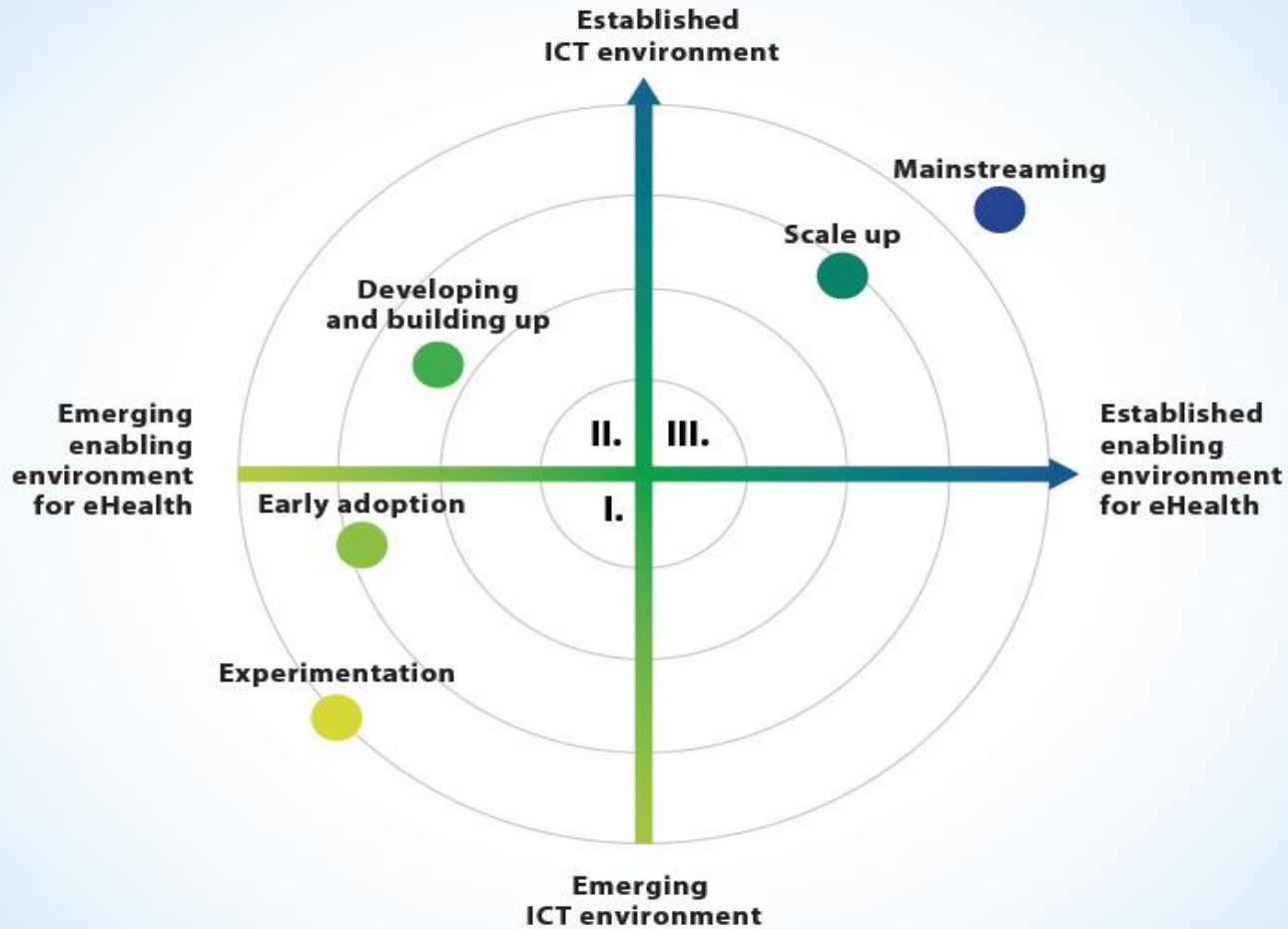
- eHealth projects implemented so far have merely created small-scale applications of eHealth that are unable to effectively communicate or share information with other health systems or across geographies, technologies or programs.
- There are barriers to scaling up most of the projects to support a larger patient and care provider base.
- Some of the projects are not running currently or are under- utilized.
- Most of the projects lacked adequate stakeholders' involvement in all phases from conception to implementation.
- Most of them are funded in ways that may threaten their sustainability/scalability.
- Most of them have not been evaluated to determine their impact on health system, patient health outcomes and their cost-effectiveness.
- There is currently no integration of the multiple and wide variety of health information systems in the country

# Barriers to eHealth in Nigeria

- Lack of National eHealth Strategy and Policy.
- Lack of eHealth Legislative Framework.
- Erratic electric power supply.
- Inadequate government commitment (policy, legislation, funding etc.)
- Lack of/inadequate ICT infrastructure.
- Underfunding of the health sector - little or no funding for eHealth.
- Low awareness of eHealth and its importance.
- Poor attitude to wanting to change the old way of doing things.
- Inadequate human resource capacity.
- Prevalence of cyber crimes.

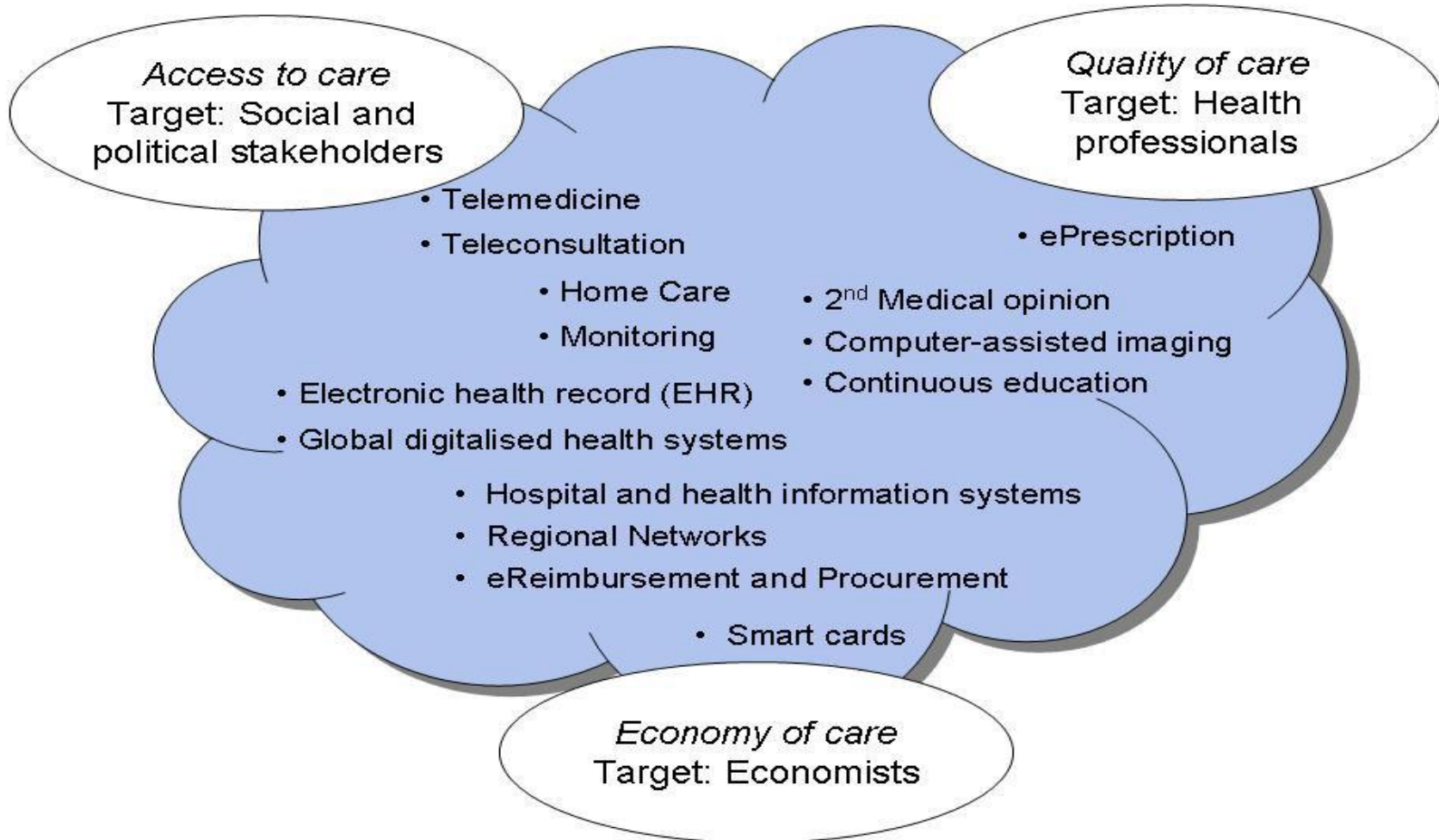


# Context for eHealth development

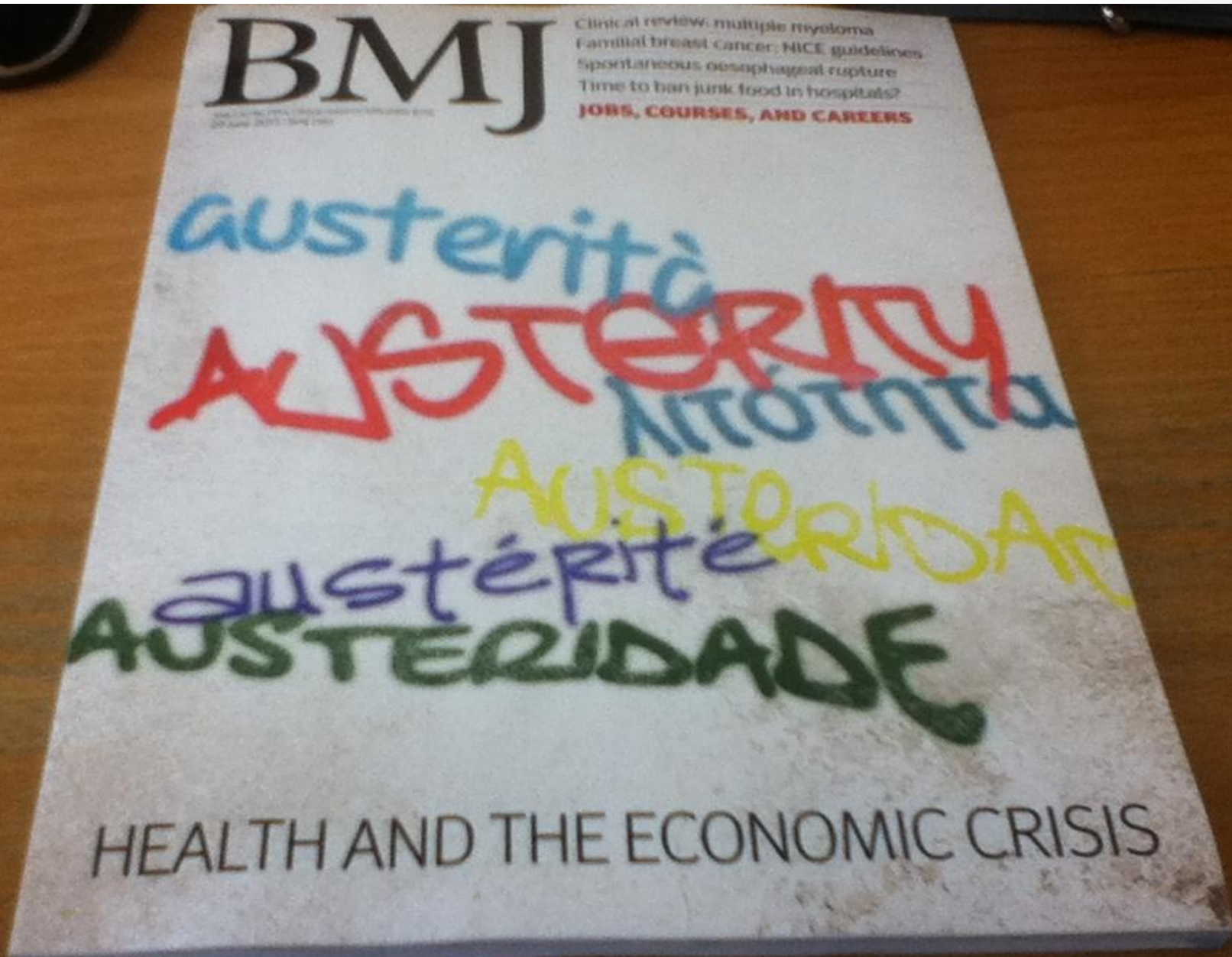


# Implications for the Cloud

## e-health solutions



# Drivers for Cloud Computing in eHealth



# Internet population 2007 vs 2012, a 2x increase in 5 years



# Drivers for Cloud Computing in eHealth

- New imperative to secure rapid and reliable transferability of data between health decision-makers in today's healthcare environment
- The need to be able to transfer data reliably 24/7 to effect optimal care
- Changing demographics , health systems constraints /cost pressures that demand new effective solutions
- Cost-sustainable
- The nature and impacts of health systems reforms
- The availability of significant experience from other industry that have adopted the cloud
- The amount of data that health care providers must deal with is daunting

# Impact of the Cloud on eHealth

- **Increased transparency and governance to health systems**
- **Security**
- **Scalability**
- **Mobility**
- **Cost Reduction**
- **Sharing**



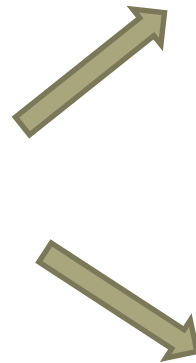
# Conclusion

- Growing expectations, changing demographics, and resource limitations require wise investment in eHealth solutions that address major health needs
- Cloud in eHealth presents new opportunities for access to quality health care, for all
- Enabling eHealth strategy, policies are required to ensure that these opportunities are fully harnessed
- Solutions that are designed and implemented now must form the foundation (practice and technology infrastructure) for decades to come

Health is an **universal** right



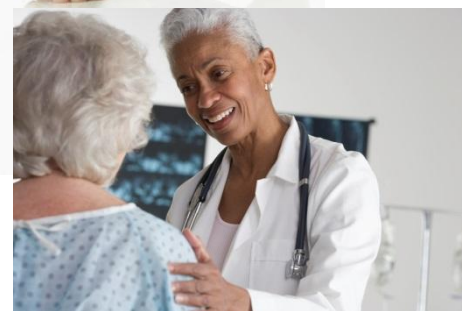
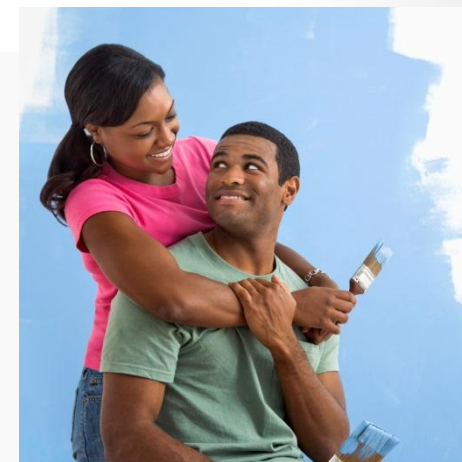
eHealth



eHealth requires a **glocal** approach



# For Our Sakes & Future Generations



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