DEVELOPMENT OF A NATIONAL EHEALTH STRATEGY FOR SOUTH AFRICA

WHO-ITU MEETING,

NATIONAL eHEALTH STRATEGY DEVELOPMENT:

COUNTRY EXPERIENCE AND NEXT STEPS

health

Department:
Health
REPUBLIC OF SOUTH AFRICA

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eHealth
Strategy
South Africa
2012

health
Department of
Health
REPUBLIC OF SOUTH AFRICA

A long and healthy life for all South Africans

1. BACKGROUND (1)

- The National Department of Health in South Africa, working in conjunction with the Medical Research Council (MRC) and Provincial DoHs, developed the eHealth Strategy for South Africa.

- The process started in 2009, led by the National DoH and the National Health Information Systems Committee of South Africa, (NHISSA) which consists of Senior Managers for HIS and ICT in the 9 Provinces of South Africa.

- A draft eHealth Strategy was produced in 2010 and circulated widely for comment. Several iterations of the strategy were subsequently produced.

- In 2011, a revised and concise eHealth Strategy was produced, with clear time frames for implementation. This version of the eHealth Strategy was aligned to the strategic priorities of the Health Sector for the 2009-2014 term office of government.

1. BACKGROUND (2)

- The 2011 version of the eHealth Strategy was endorsed by the Heads of Health (National and Provincial) on the 23rd March 2012, as a roadmap of the health sector.

- It was endorsed by the National Health Council (National Minister and Provincial MECs for Health on the 19th April 2012).

- The Department of Communication plays a critical role in the development of the infrastructure and connectivity required for the successful implementation of the eHealth Strategy.

- The private sector has not been involved in the development of the eHealth Strategy. Proposal from the Strategy Development Team was that when strong eHealth policies are in place and practised (especially around governance, procurement and standards), private sector can be included as key stakeholders.

2. PARTNERSHIPS

■ Medical Research Council of South Africa has played a key role in the development of the eHealth Strategy, especially in relation to:

♦ Shaping the content of the strategy

♦ Recommending good practice; and

♦ Proposing innovative solutions, especially suited to the country context.

■ The public sector has commenced consultation with key stakeholders including:

♦ Private Sector

♦ South African Telemedicine Association (a member of the International Society for Telemedicine and e-Health (ISfTeH)

♦ South African Health Informatics Association (SAHIA)

♦ Etc.

3. PROBLEM STATEMENT (1)

Extracted from the 5-year Negotiated Service Delivery Agreement (NSDA) of the Health Sector for 2010-2014:

"Although large sums of money have been used to procure health ICT and HIS in South Africa in the past, the ICT and HIS within the Health System are not meeting the requirements to support the business processes of the health system thus rendering the healthcare system incapable of adequately producing data and information for management and for monitoring and evaluating the performance of the national health system. This results from the lack of technology regulations and a lack of policy frameworks for all aspects of infrastructure delivery."

3. PROBLEM STATEMENT (2)

- No national eHealth strategy and corresponding Enterprise Architecture

- Widely differing levels of eHealth maturity across and within provinces

- A large number of disparate systems between which there is little or no interoperability and communication

- Inequity of eHealth services provided and expenditure on eHealth across provincial and national departments of health

- Broadband connectivity expensive and still out of the reach of many.

- Absence of a national master patient index

- Absence of unique identification of patients

- Limited capacity within the public sector for implementation
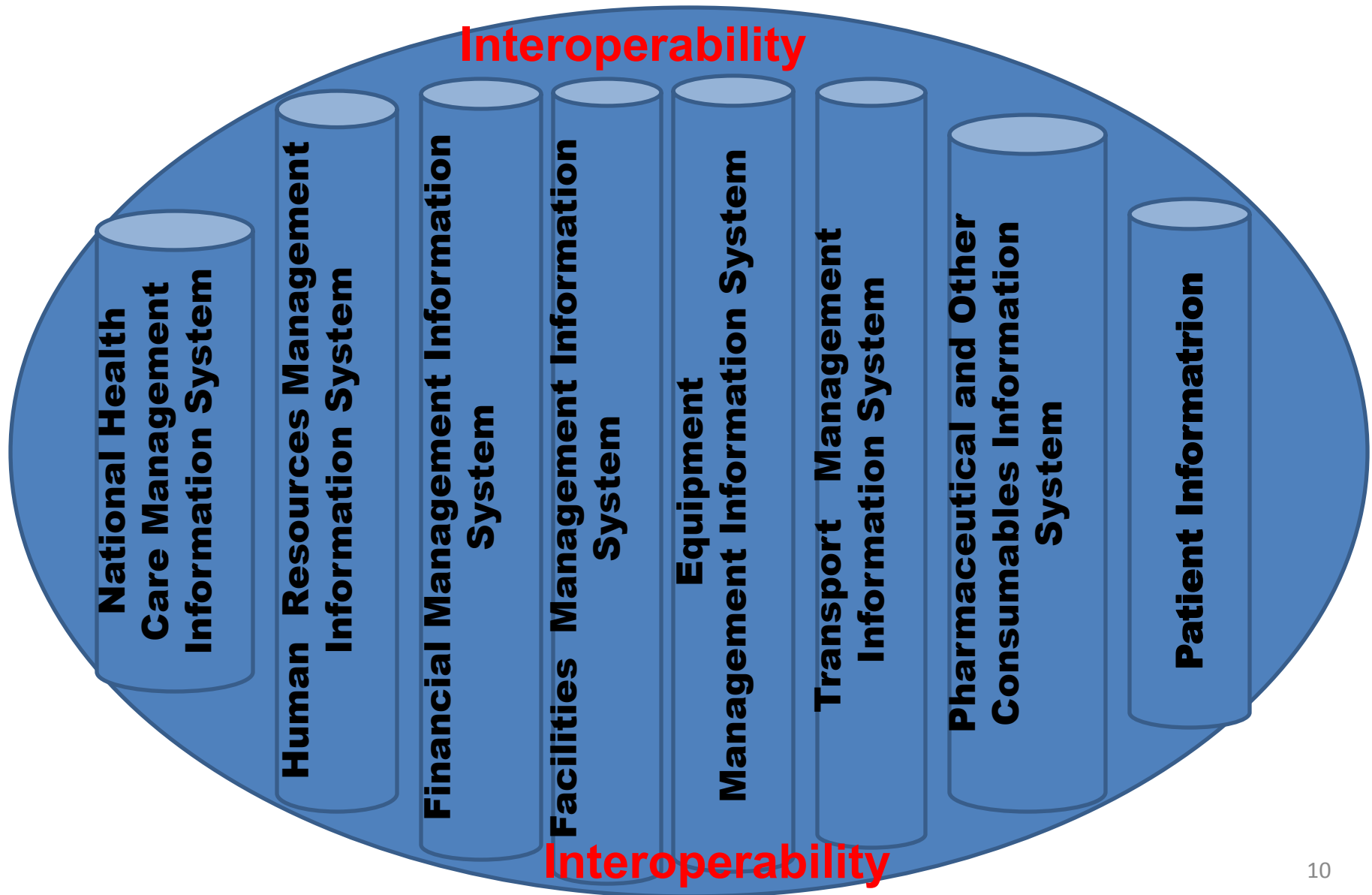
4. CURRENT CHALLENGES (1)

PROVINCE	PATIENT MANAGEMENT/ HOSPITAL INFORMATION SYSTEM USED
Eastern Cape	DELTA 9
Free State	Meditech; PADS
Gauteng	Medicom; Soarian MedSuite; Pharm Assist; PAAB;
KwaZulu-Natal	Medicom; Meditech; PALS; Proclin; REMED (Chillisoft)
Limpopo	Medicom
Mpumalanga	PAAB
North West	PAAB
Northern Cape	Nootroclin
Western Cape	DELTA 9; PHC Information System (PHCIS)

- **Individual systems function efficiently in each Province, but lack interoperability to facilitate data exchange at a national level.**

4. CURRENT CHALLENGES (2)

■ Four Cs as they are commonly known:

■ **C**ulture of ICT use;

■ **C**apacity to manage implementation;

■ **C**onnectivity and

■ **C**osts of implementation.

6. VISION, MISSION AND AIM OF eHEALTH

Vision

 eHealth: Enabling a long and healthy life for all South Africans.

Mission

To establish eHealth as an integral part of the transformation and improvement of healthcare services in South Africa, especially enabling delivery on the health sector's Negotiated Service Delivery Agreement 2010-2014.

Aim

Provide a single, harmonised and comprehensive e-Health strategy to support the medium-term priorities of the public health sector, for better health care.

Pave the way for future public sector eHealth requirements, including access to records by health care providers andpatient mobility.

Lay the requisite foundations for the future integration and coordination all eHealth initiatives in the country (both public sector and private sector).

7. eHEALTH STRATEGY CONTRIBUTION TO THE STRATEGIC GOALS OF THE HEALTH SECTOR 2009-2014

- eHealth Strategy is driven by several strategic goals of the health sector for 2009-2014, including:

- Health Sector's NSDA 2010-2014
- 10 Point Plan 2009-2014
- National Health Insurance (NHI)
- Roll-out of a national electronic medical record system for ART (three tier M&E system)
- Proposed National Electronic Health Record system

- eHealth Strategy adopts the four outputs of the NSDA 2010-2014 & 10 Point Plan 2009-2014 as the framework for contributing to the achievement of the Health Sector's Strategic Goals.

8. TWELVE (12) KEY PRINCIPLES

1) Get basics right
2) Incremental approach
3) Early wins
4) Advocacy of benefits
5) National co-ordination
6) Security, confidentiality, patient privacy
7) Consensus on information governance
8) Value for money
9) Open source solutions where appropriate
10) Single official source for health statistics
11) Adhere to NHIS/SA information management principles
12) Government IP ownership of public sector eHealth initiatives

9. TEN (10) STRATEGIC PRIORITIES

■ eHealth Strategy consists of (10) strategic priorities that must be addressed in order to leverage eHealth to strengthen healthcare transformation in South Africa.

■ **These are:**

1) Strategy and Leadership
2) Stakeholder Engagement
3) Standards and Interoperability
4) Governance and Regulation
5) Investment, Affordability and Sustainability
6) Benefits Realisation
7) Capacity and Workforce
8) eHealth Foundations
9) Applications and Tools to support Healthcare Delivery
10) Monitoring and Evaluation of the eHealth Strategy

Strategic priority	Key Activities	Outputs	Target Dates	
			Commence	Complete
1: Strategy and Leadership	Identify a governance structure to lead the implementation of the eHealth strategy	NHISSA strengthened and designated as the governnace structure for the eHealth Strategy NHISSA submits quarterly progress reports to the National DoH	June 2012 August 2012	August 2012 March 2017
	Establish partnerships for the implementation of the eHealth strategy	Key stakeholders identified and terms of engagement documented	June 2012	May 2013
	Ensure synergies with the ICT strategies of other government departments	ICT Strategy updated to reflect synergies with the ICT strategies of other government departments	June 2012	December 2012
	Mobilise resources for implementation of the eHealth strategy	eHealth strategy costed Ten (10) year budget produced addressing issue of affordability and sustainability.	June 2012 September 2012	September 2012 March 2017
	Develop necessary eHealth components of an Enterprise Architecture for Health	Enterprise Architecture for health completed consisting of: •Data Architecture •Application Architecture •Technology Architecture •Business Architecture	August 2012	December 2012

Strategic priority	Key Activities	Outputs	Target Dates	
			Commence	Complete
2: Stakeholder Engagement	Support the development of nine provincial ICT plans aligned to the eHealth strategy	Provincial ICT Plans for 2013/14 produced and aligned to the eHealth strategy	July 2012	December 2012
	Support the provincial health information systems committees to incorporate the eHealth strategy in their engagement work with districts and local communities.	Provincial health information systems committees established in all Provinces	July 2012	May 2013
	Facilitate the establishment of professional registration for eHealth practitioners.	Curriculum for eHealth practitioners established and approved by SAQA	July 2012	December 2013
		eHealth Practitioners registered with relevant Professional body	July 2012	July 2014
	Identify other important stakeholder groups and engage with them regarding the impact of implementation of the eHealth strategy through awareness campaigns and imbizos.	Key stakeholders identified and terms of engagement documented	June 2012	August 2012
	Ensure consistency between eHealth strategy and other government programmes and strategic plans, e.g. health infrastructure plans	Annual Health facility infrastructure plans informed by the eHealth Strategy	Start July 2012	Annually

Strategic priority	Key Activities	Outputs	Target Dates	
			Commence	Complete
3: Standards and interoperability	eHealth Standards authority established.	eHealth Standards authority appointed by the National DoH	August 2012	September 2012
		eHealth Standards authority submits quarterly progress reports to the National DoH	September 2012	March 2017
	Finalise a standards framework for eHealth	Standards framework for eHealth published	August 2012	December 2012
	Establishment a mechanism for accreditation (which must be renewed annually)	Accreditation system in place for new eHealth solutions proposed for the health sector	September 2012	March 2017
4: Governance and regulation	Develop and approve a national eHealth policy framework.	national eHealth policy framework developed, finalised and adopted by the National Health Council	June 2012	October 2012
	Develop and approve a national eHealth regulatory framework.	eHealth regulatory framework developed, finalised and adopted by the National Health Council	June 2012	October 2012
	Performance management agreements with relevant senior managers responsible for ICTs (GITOS) should reflect implementation of the eHealth strategy.	eHealth strategy objectives reflected in the Performance management agreements of relevant senior managers responsible for ICTs (GITOS)	June 2013	Annually

Strategic priority	Key Activities	Outputs	Target Dates	
			Commence	Complete
4: Governance and regulation	Determine effective risk mitigation for eHealth projects.	Risk mitigation strategy for eHealth projects published	June 2012	December 2012
	Establish regulations on privacy, confidentiality and security.	Regulations on privacy, confidentiality and security published	June 12	October 2012
	Establish a national standards compliance body	National standards compliance body established	July 2012	December 2012
	Develop a licensing policy	Licensing policy established	July 2012	December 2012
5: Investment, affordability and sustainability	Cost the eHealth strategy and develop a ten year budget addressing issue of affordability and sustainability.	eHealth strategy costed Ten (10) year budget produced addressing issue of affordability and sustainability.	July 2012	September 2012
	Develop rules for financing of eHealth for the enterprise architecture.	Health sector rules for financing of eHealth for the enterprise architecture produced	June 2012	August 2012
	Develop rules for procurement of eHealth enterprise architecture.	Procurement rules for eHealth enterprise architecture adopted by the National Health Council	July 2012	December 2012
	Align provincial ICT plans to the enterprise architecture.	Nine (9) Provincial ICT plans aligned to the enterprise architecture.	December 2012	March 2017, reviewed annually
	Provincial ICT procurement aligned to EA (lifting of moratorium once this is achieved)	Provincial ICT procurement aligned to EA (lifting of moratorium once this is achieved)	December 2012	March 2017, reviewed annually

Strategic priority	Key Activities	Outputs	Target Dates	
			Commence	Complete
6: Benefits realisation	Develop a benefits realisation plan which specifies health outcome benefits expected at local level for all eHealth interventions	Benefits realisation plan produced	June 2012	September 2012
	Engage all user groups	Quarterly stakeholder meetings convened	July 2012	March 2017
	Establish a mechanism for conducting usability assessments, to ensure that the public health sector is an "informed buyer" of ICT solutions	Mechanism for conducting usability assessments established	July 2012	December 2012
7: Capacity and workforce	Develop an Health IT workforce development strategy, aligned to the National Health Workforce Strategy	Health IT workforce development strategy produced	June 2012	December 2012
	Health workforce development with respect to eHealth	Health IT workforce development strategy produced	July 2012	December 2012
	Professional accreditation for Health Informatics professionals with HPCSA	Professional accreditation for Health Informatics professionals with HPCSA	July 2012	December 2013
	Leverage partnerships and collaborations for Health Informatics training	Memoranda of Understanding (MoU) entered into with relevant institutions for partnerships and collaborations for Health Informatics training	July 2012	December 2013

Strategic priority	Key Activities	Outputs	Target Dates	
			Commence	Complete
8: eHealth foundations	Implementation of a national patient master index for unique patient identification - national ART and TB treatment system as first phase	National patient master index developed for unique patient identification, starting with - National ART and TB treatment system as first phase	July 2012	December 2012
	Implementation of basic national Electronic Health Record (EHR) including an information exchange to support interoperability	Basic national electronic health record implemented, including an information exchange to support interoperability	July 2012	May 2013
	Ensure connectivity - broadband connectivity, last mile connectivity	Connectivity - broadband connectivity, last mile connectivity achieved	July 2012	December 2012

Strategic priority	Key Activities	Outputs	Target Dates	
			Commence	**Complete**
9: Applications and Tools to support healthcare delivery	Develop and implement eHealth policy	eHealth policy developed and implemented	June 2012	reviewed quarterly
	Identify eHealth projects in line with objectives of the eHealth strategy	List of eHealth projects produced in line with objectives of the eHealth strategy	June 2012	reviewed quarterly
	Finalisation of the mHealth strategy	mHealth strategy finalised	Draft version available	Finalised in August 2012
	Develop and implement mHealth policy	mHealth policy finalised	June 2012	December 2012
	Identify mHealth projects in line with mHealth policy	mHealth projects identified in line with mHealth policy	June 2012	Reviewed quarterly
	Finalise telemedicine strategy	Finalise telemedicine strategy	Draft version available	December 2012
	Develop and implement Telemedicine policy	Develop and implement Telemedicine policy	June 2012	December 2012
	Identify Telemedicine projects in line with Telemedicine policy	Telemedicine projects identified in line with Telemedicine policy	June 2012	Reviewed quarterly
10: Monitoring and Evaluation of the eHealth Strategy	Establish a mechanism for monitoring and evaluation of the eHealth strategy	M&E Strategy for eHealth developed, aligned to the overarching M&E Strategy of the health sector. eHealth Strategy monitored	July 2012 September 2012	September 2012 March 2017

10. SOME CONCRETE DELIVERABLES FOR 2012/13

- Enterprise Architecture (structural design of major resources required for eHealth, systems, human resources, skills, change management)

- Standards and Interoperability Framework

- Basic national electronic health record implemented, including an information exchange to support interoperability

- Population registration and patient identification strategy and systems

- These four aspects have been commissioned to the Centre for Scientific and Industrial Research (CSIR) to develop.

- Regulatory Framework (eHealth policy)
- Costing of the eHealth Strategy

- National eHealth Strategy approved and being published

- National Health Information Systems Committee of South Africa plays a key role in providing technical oversight for the operational implementation of the eHealth Strategy.

- At a political level, a national eHealth/ICT4H Steering Committee has been established, led jointly by the Deputy Ministers for Health and Communication .

- eHealth/ICT4H Steering Committee has 6 Working Groups focusing on:
  - Policy and Regulatory Frameworks
  - Interoperability and Standards
  - Capacity Building
  - Infrastructure Services Support
  - Research and Evidence
  - Reference Implementation/Integrated Lighthouse project

11 . PROGRESS TO DATE (2)

- A review of mHealth experiences in South Africa was conducted by the Medical Research Council (MRC) & University of the Western Cape (School of Public Health) in 2011

- The review confirms the following benefits of the use of mHealth:

  - Increased efficiency through real-time monitoring of data entry, including automated quality checks

  - Improved datasecurity via unique identifiers & access control

  - Improved supervision and efficiency through comprehensive monitoring of staff and programme activity

  - The use of mHealth technology during the FIFA World Cup 2010 also attests to its utility for web-based Disease Surveillance.

THANK YOU!