eHealth

Dr Alvin B. Marcelo University of the Philippines Manila

Outline

- What is eHealth?
- What are eHealth possibilities for your community?
- How can you support eHealth in your community?
- What's in it for you?
- Next steps

eHealth = "ICT for health"



eHealth in our community

- · Rural health unit
 - Electronic medical records
 - RxBOX
 - Telemedicine
- Community eCenters
 - Advocacy
 - Infrastructure
 - Applications and content brokering
 - Capacity-building

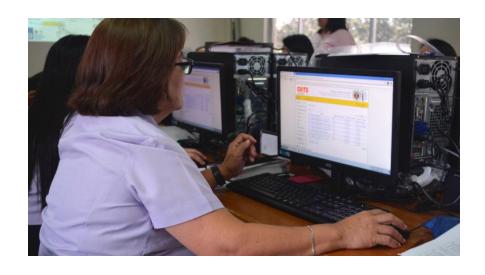
Electronic Medical Records













RxBOX Device

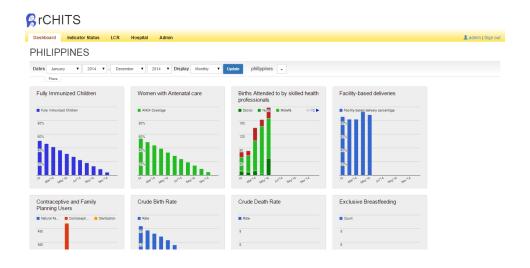


blood pressure, oxygen levels



partograph, fetal heart tones

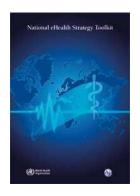




Telemedicine

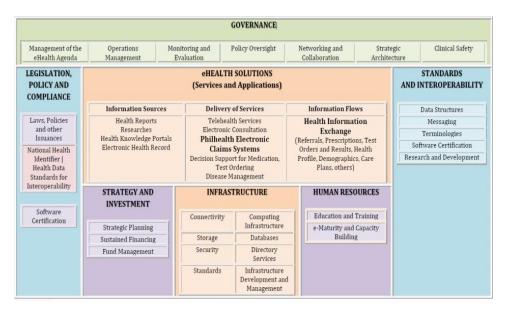


WHO-ITU National eHealth Strategy Toolkit (2012)





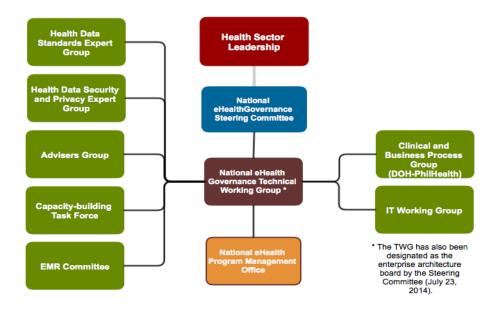
Philippine eHealth Strategic Framework and Plan



Process

- Establish leadership and governance
- Ensure governance framework setting and maintenance
- Ensure benefit delivery, risk optimization, resource optimization
- Ensure stakeholder transparency
- Manage the IT management framework
- Manage the enterprise architecture

eHealth Leadership and Governance



Why Governance?

- "eHealth is the use of ICT in health"
- Healthcare is complex.
- ICT is complex.
- Without governance, combining two complex domains will result in greater complexity.
- Governance provides a systematic approach to managing the complexity of combined systems such as setting clear directions, applying proper management principles, and assuring stakeholders receive benefits from the eHealth system.

eHealth National Governance Steering Committee Amending Joint DOH-DOST Department Memo No. 2013-0200a on

Amending Joint DOH-DOST Department Memo No. 2013-0200a or July 2014

Sec. Janet L. Garin - DOH, Chair Sec. Mario Montejo - DOST, Co-chair USec. Louis Casambre - DOST-ICTO ASec. Gerardo Bayugo - DOH Dr. Jaime Montoya - DOST-PCHRD Atty. Alexander A. Padilla - PHIC Dr. Carmencita D. Padilla - UP Manila Dr. Patricia Licuanan - CHED Ms Jovita Aragona - PHIC Asec. Denis Villorente - DOST-ASTI

Consultants/Advisers to the SComm

Dr. Alvin Marcelo - UPM Mr. Lito Abando - PHIC

eHealth National Governance Steering Committee

Functions

- Evaluate stakeholder needs
- Direct and guide the finalization and implementation of PeHSFP
- Monitor progress
- Ensure framework setting and maintenance (EDM01)
- Ensure benefits delivery (EDM02)
- Ensure risk optimization (EDM03)
- Ensure resource optimization (EDM04)
- Ensure stakeholder transparency (EDM05)

Meeting Schedule

- Quarterly, 2 hours
- Called by the DOH Secretary
- Agenda: Performance updates, resolve issues, formalize decisions

Reporting

- MITHI Steering Committee (DBM Lead)
- OP Science and Technology Cluster (through DOH DLLO)

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eHealth Technical Working Group

Amending Joint DOH-DOST DM. No. 3013-0200

Chair - MS. CRISPINITA VALDEZ (DOH-KMITS)

Co-Chair - MS. OPENA (DOST-PCHRD) and MS. ARAGONA (PHIC)

Members:

- DOH-IMS: Ms. Charity Tan, Mr. Robert Manuel
- DOST-ICTO: Ms. Juli Ana Sudario
- DOST-ASTI: ASec. Denis Villorente
- iGovPhil: Ms. Toni Torres
- DOST-PCHRD: Mr. Vince Tumlos
- PHIC: Ms. Cynthia Corvite, Mr. Bobby Crisostomo, Mr. Lito Abando, Mr. Jay Bernolia
- UPM-NTHC; Dr. Portia Marcelo
- NKTI: Dr. Genlinus Yusi
- PHC: Dr. Gerardo Manzo/Dr. Peter San Diego
- NNC: Ms. Hygeia Gawe/Mr. Al Salipot
- POPCOM: Ms. Jacklyn Robel/Mr. Munich Muñoz
- FDA: Mr. Ryan Deguma/Ms. Tin Asetre
- Functions: Align, plan, and organize activities along directions of the Governance (Manage the IT management framework - APO01)

eHealth Program Management Office

Functions as SECRETARIAT

 Provide day-to-day operational support to the Philippine eHealth Strategic Framework and Plan

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Decision Making Process



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eHealth Policy Documents

bit.ly/ehealthpmo

Major Agreements

- Create a Health Data Standards Expert Group
 - Output
 - 1. Standards Catalog
 - 2. Standards Change Management Manual
 - 3. National Health Facility Registry nhfr.doh.gov.ph bit.ly/ehealthstandardscatalog bit.ly/ehealthstandardschange

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Major Agreements

- Create a Health Data Privacy and Security Expert Group
 - Output
 - 1. National Guidelines for Health Data Privacy
 - 2. Consent framework

bit.ly/ao_ehealthprivacy

Major Agreements

- Create an Advisers Group
 - Output
 - 1. Recommend Risk Management
 - 2. Recommend compliance to Data Privacy Act (informing head of offices)

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Major Agreements

- Prioritize the PhilHealth Tsekap (primary care) business process
 - Output
 - 1. Document schema(template) for Tsekap
 - 2. Document schema for maternal and child care

Major Agreements

- Create an Electronic Medical Records Expert Group
 - Output
 - 1. Implement the Philippine Health Information Exchange

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Electronic Medical Records









Other EMR

i-ClinicSys is a DOH developed electronic medical record for clinics like rural health units. It is the standard reference model of the Philippine Health Information Exchange.

Electronic Medical Records













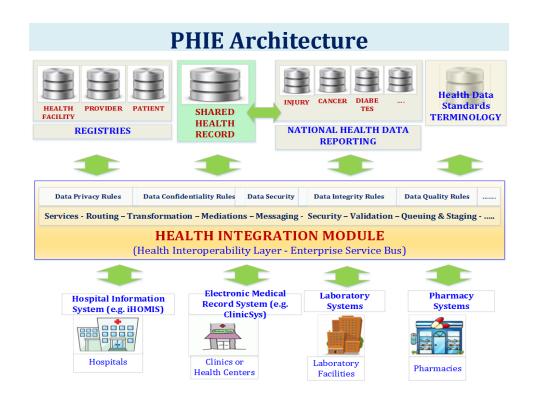




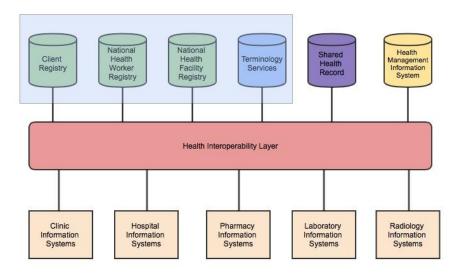


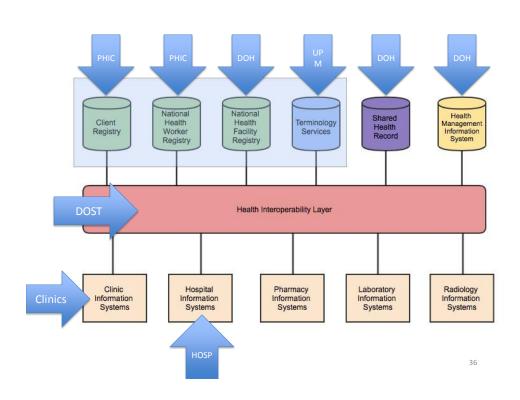






PHIE Architecture





Generic Information Architecture

- Who (provider)
- Did what (terminology service)
- To who (client)
- When (timestamp)
- Where (facility)

What humans see: Dr Santos vaccinated (with OPV) patient Juan dela Cruz on July 7, 2015 at the Lagrosa Health Center.

What the PHIE sees: PRC00073695 | OPV | PHIC 1135247689374-2 | 07/07/2015 | NHFR 9489

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If all health information systems..

- · Use the registries
- Submit consistently to the Shared Health Record
- We can generate a near-real time health management information system

Interoperability Laboratory

- To be setup by University of the Philippines
- Help stakeholders understand, participate in, and implement the PHIE
- Funded by eGov (2013), MITHI (2014), other funders (2015-2016)

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Next Steps

- Stronger active governance
- Simpler architecture
- Robust standards and registries
- A clear privacy regime
- Data sharing
- Bottomline: capacity-building

Summary

- It has taken years to get to where we are now we're almost there.
- Governance, architecture, and standards are important components of the national health information system.
- To make the most out of these components, stakeholders must participate and collaborate on the shared platform of the PHIE.
- While the technology interoperability is not difficult, the human interoperability aspect deserves more study.

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For more information

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