

# eHealth Strategic Plan And Philippine Health Information Exchange

Department of Health  
25 October 2017

Philippine Institute for Development Studies Conference Hall



# CONTEXT SETTING

Philippine Strategic Framework for ICT Sector, Philippine eGovernment Master Plan 2013-2016

Philippine Digital Strategy 2011-2016

Philippine Dev't. Plan



SDGs

Philippine Health Agenda  
National Objectives for Health



WORLD HEALTH ASSEMBLY  
58<sup>th</sup> & 62<sup>nd</sup> WHA eHealth resolutions

Health Enterprise Architecture

DOH Info. System Strategic Plan (DOH ISSP2015-2017; 2018-2020)

Phil. eHealth Strat. Framework & Plan (2013 – 2020; 2017-2023)

## Philippine Health Information System

<b>Health Policy Services</b>	<b>Health Regulation</b>	<b>Hospital Services</b>	<b>Technical Support</b>	<b>Support to Operations</b>
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Frontline Services	Regulations	Pharmacy Services	Community Based Services	Disease Registries   Surveillance	Health Finance & Insurance
Emergency Response	Health Supply Chain	Health Service Delivery	Diagnostic Services	Environmental Monitoring	Human Resources in Health

# eGOV Master Plan Framework

## e-Government Governance: Organization, Regulation and Policies

### Client-centered Government

Government Portal  
Open Government  
Open Data

### Networked Government

Groupware  
Planning/KM/Risk Management

### Citizen (G2C)

e-Education  
**e-Health & Welfare**  
e-Justice, Peace and  
Order

### Business (G2B)

Investment/Tourism  
e-Logistics  
e-Agriculture

### Government to Government

Financial Management (GIFMIS, eTax)  
Human Resources (HRIS)  
Asset Management and Procurement

### SHARED SERVICES

e-Documents

e-Signatures (PKI)

e-Payment

GIS

### REGISTRIES

Citizen

Land

Business

Vehicles

### INFRASTRUCTURE

Internet Access, Data Center, Security

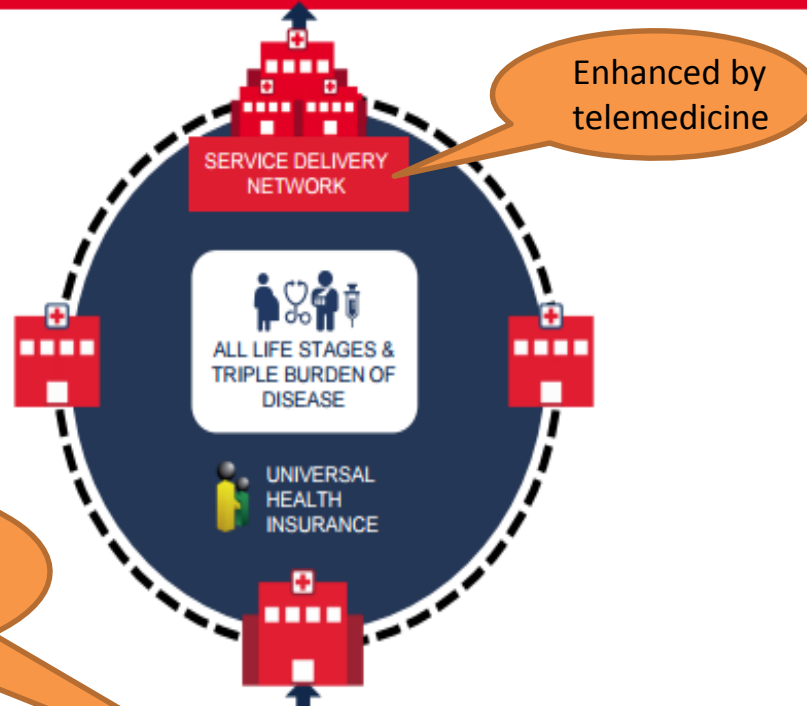


Goals: Attain Health-Related SDG Targets  
Financial Risk Protection, Better Health Outcomes, Responsiveness

Values: Equity, Efficiency, Quality, Transparency

3 Guarantees

Invest in eHealth &  
Data for Decision  
Making



A C H I E V E

# THE PHILIPPINE HEALTH AGENDA

**A** Advance health promotion, primary care and quality

**C** Cover all Filipinos against financial health risk

**H** Harness the power of strategic HRH

**I** Invest in eHealth and data for decision-making

**E** Enforce standards, accountability and transparency

**V** Value clients and patients

**E** Elicit multi-stakeholder support for health

## I Invest in eHealth and data for decision-making



1. Require online data\* submission as requirement for licensing & contracting of health facilities and drug outlets
2. Mandate the use of Electronic Medical Records (EMR) in all health facilities
3. Invest in nation-wide surveys, administrative data and disease registries
4. Automate major business processes
5. Facilitate open access to anonymized data

\* clinical and administrative



# Philippine eHealth Strategic Framework & Plan, 2014-2020

# National eHealth Vision

## VISION

By 2020, an ICT-enabled Philippine Health System towards better and equitable access to quality health care services, and easier access to secure real time and quality health data and information for evidenced-based decision making.

IT-Enabled Health Services

IT in All Public Health Facilities

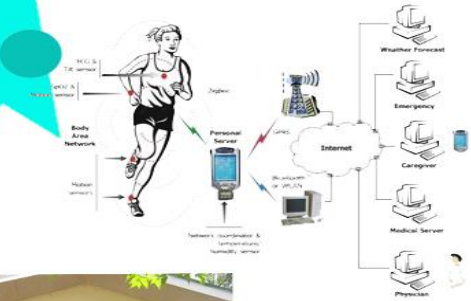
EHR Systems Validation

Health Data Standards Use

PHIE Implementation

EHR Implementation

Philippine Health Information Exchange



## ELECTRONIC MEDICAL RECORDS



other EMRs

HOSPITAL MANAGEMENT INFORMATION SYSTEMS

# eHEALTH PROGRAM COMPONENTS

## GOVERNANCE

Management of eHealth Agenda

Operations Management

Monitoring and Evaluation

Policy Oversight

Networking and Collaboration

Strategic Architecture

Clinic Safety

## LEGISLATION, POLICY, AND COMPLIANCE

Laws, Policies and other Issuances

National Health Identifier  
Health Data Standards for Interoperability

Software Certification

## eHEALTH SOLUTIONS (Services and Applications)

### Information Sources

Health Reports  
Researches  
Health Knowledge Portals  
Electronic Health Record

### Delivery of Services

Telehealth Services  
Electronic Consultation  
**PHIC Tsekap**  
Electronic Claims System  
Decision Support for Medication  
Test Ordering  
Disease Management

### Information Flows

**Philippine Health Information Exchange**  
(Referrals, Prescription, Test Orders and Results, Health Profile, Demographics, Care Plans, others)

## STRATEGY & INVESTMENT

Strategic Planning

Sustained Financing

Fund Management

## INFRASTRUCTURE (iGOV)

Connectivity

Computing Infrastructure

Storage

Databases

Security

Directory Services

Standards

Infrastructure Development & Management

## HUMAN RESOURCES

Education and Training

e-Maturity and Capacity Building

## STANDARDS AND INTEROPERABILITY

Data Structures

Messaging

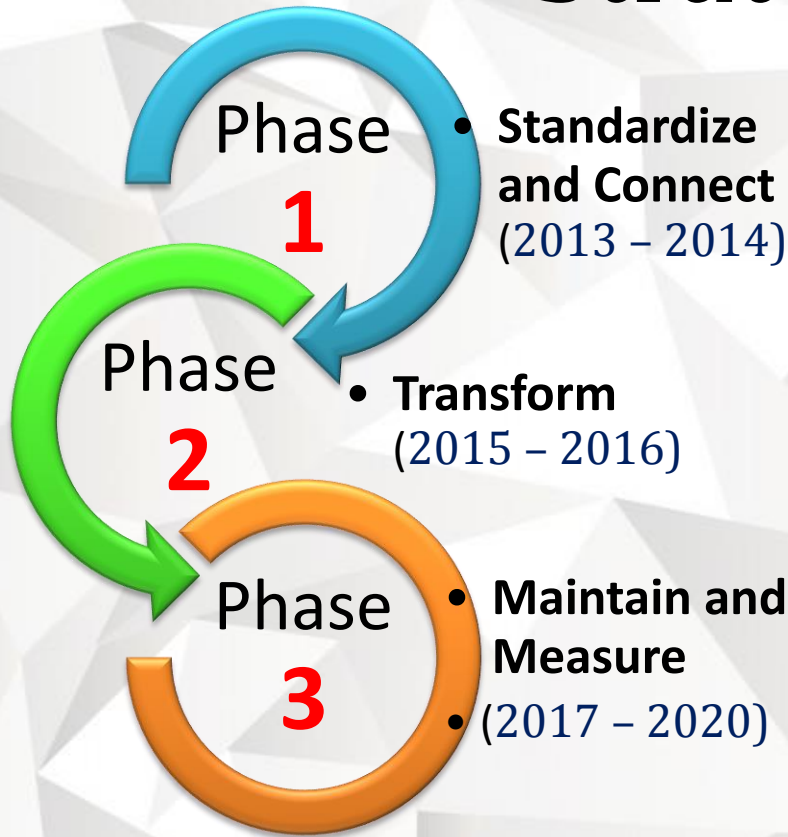
Terminology

Software Certification

Research and Development

*Based on the ITU-WHO eHealth tool kit*

# Strategic Phases



- establishment of governance and standards
- Continuing innovations to develop and implement defined national eHealth solutions.
- By this time eHealth solutions has been established and needs to be maintained and sustained

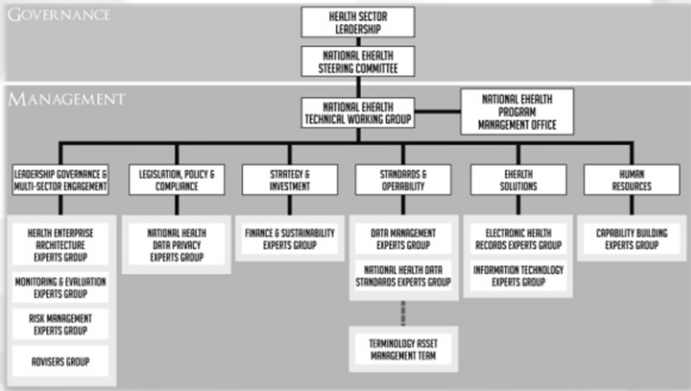




# Commitments for eHealth Plan 2013-2017

## What Have We Done So Far?





Creation of the Interagency National eHealth Governance Steering Committee and Technical Working Group

Creation of Various eHealth Experts Groups & Teams

Creation of eHealth Advisers Group (Private Sector)

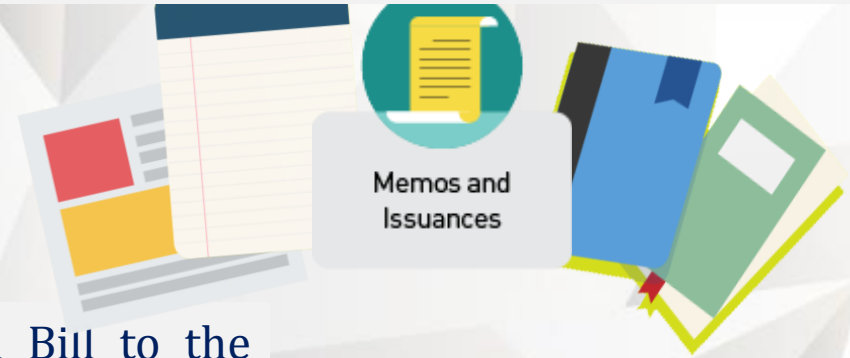


**LEADERSHIP, GOVERNANCE & MULTI-SECTOR ENGAGEMENT**

Conduct of regular National eHealth Governance Steering Committee, Technical Working Group, eHealth Advisers Group, eHealth Experts Groups and Teams' consultations, coordination and facilitation of tactical activities, and jointly issuance and operations of agreed eHealth policies, strategies, plans, guidelines, rules and procedures and/or their equivalent.



# LEGISLATION, POLICY & COMPLIANCE



Drafting and endorsement of TeleHealth Bill to the 14th & 15th Congress; **eHealth Bill** to the 15th & 16th Congress – endorsed to the DOH-Health Policy Development and Planning Bureau for inclusion to list of priority health bills for approval in the 17th Congress

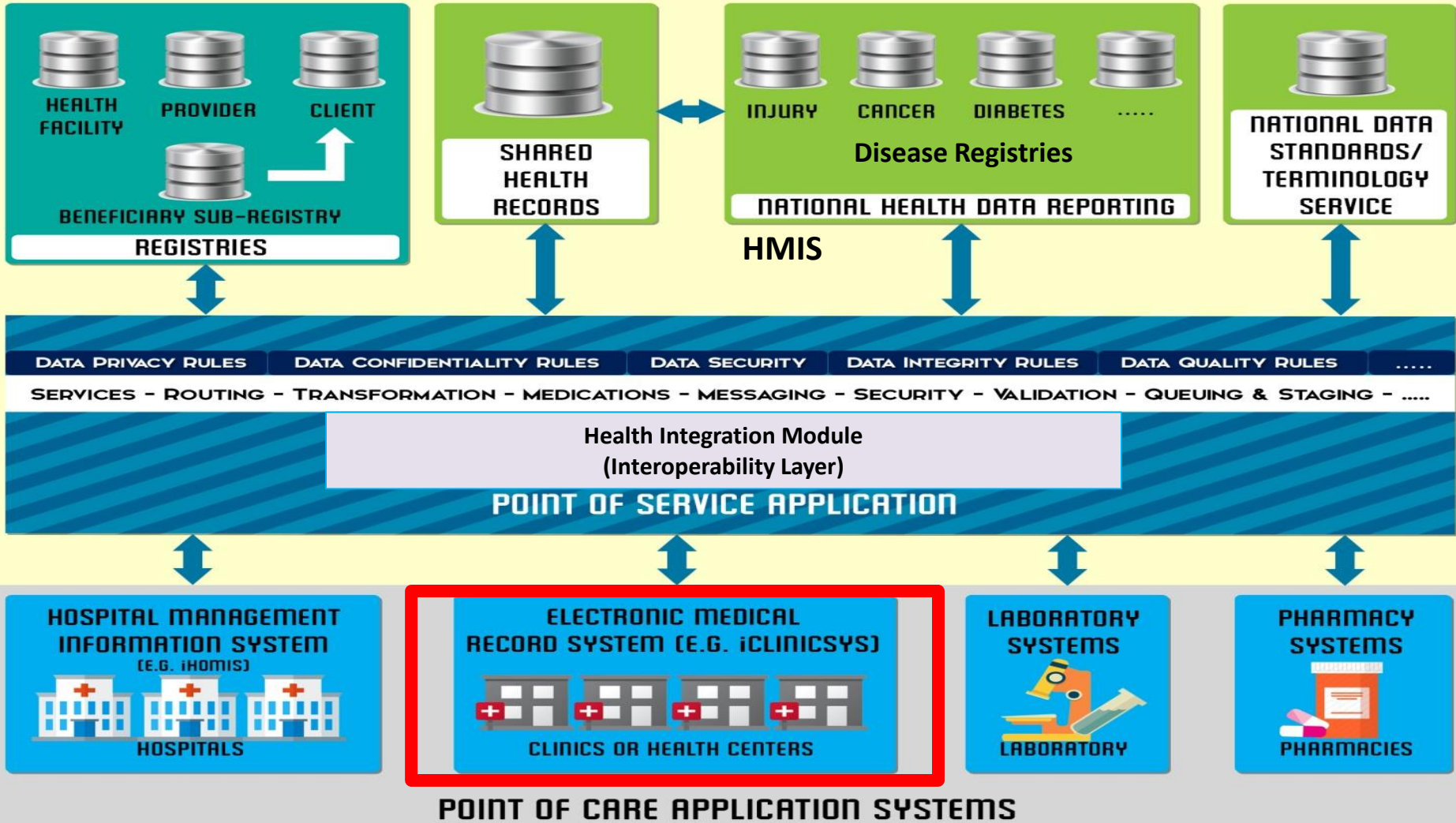
Endorsement of the Proposed **Joint Administrative Order (AO) on the Institutionalization of the Inter-Agency National eHealth Governance Committee of the National eHealth System** to the Office of the President [OP]



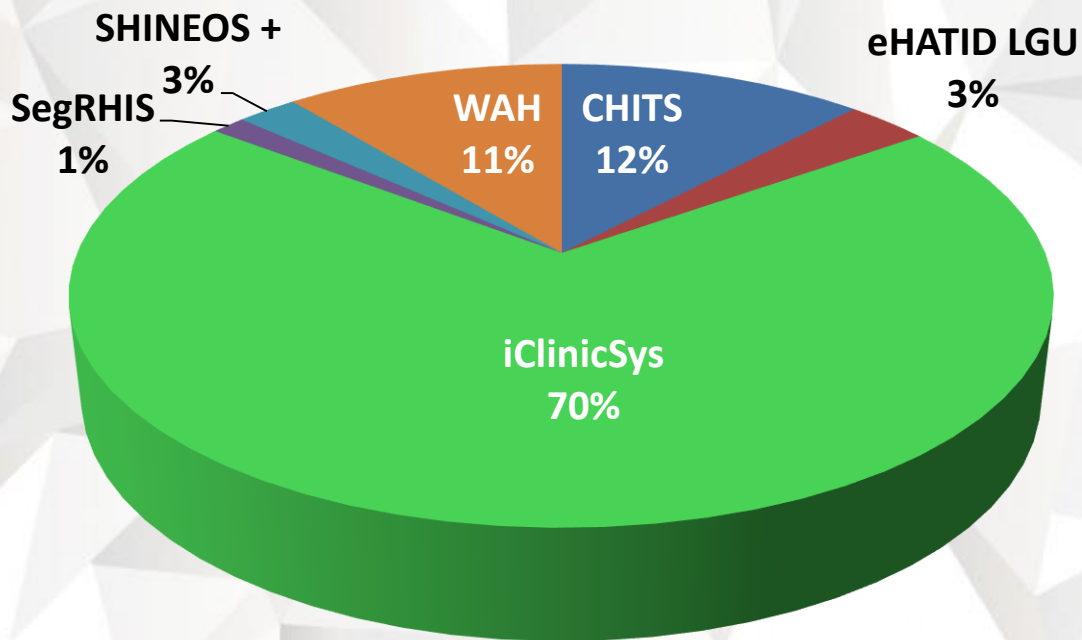
Major Issuances	Title
DOH AO No. 2013-0025	National Implementation of Health Data Standards for eHealth Standardization and Interoperability (Release 01)
DOH AO No. 2015-0037	National Implementation of Health Data Standards for eHealth Standardization and Information Interoperability (Release 02)
Joint AO 2016-0001	Implementation of the Philippine Health Information Exchange (PHIE)
Joint AO 2016-0002	Privacy Guidelines for the Implementation of Philippine Health Information Exchange (PHIE)
Joint AO 2016-0003	Adoption of the Philippine Health Information Exchange (PHIE) Lite
Joint DM 2017-0001	Creation of DOH and PhilHealth Health Information Technology Governance Structure for the Adoption of the PHIE lite



# Philippine Health Information Exchange



# Status of EMR Providers for RHUs



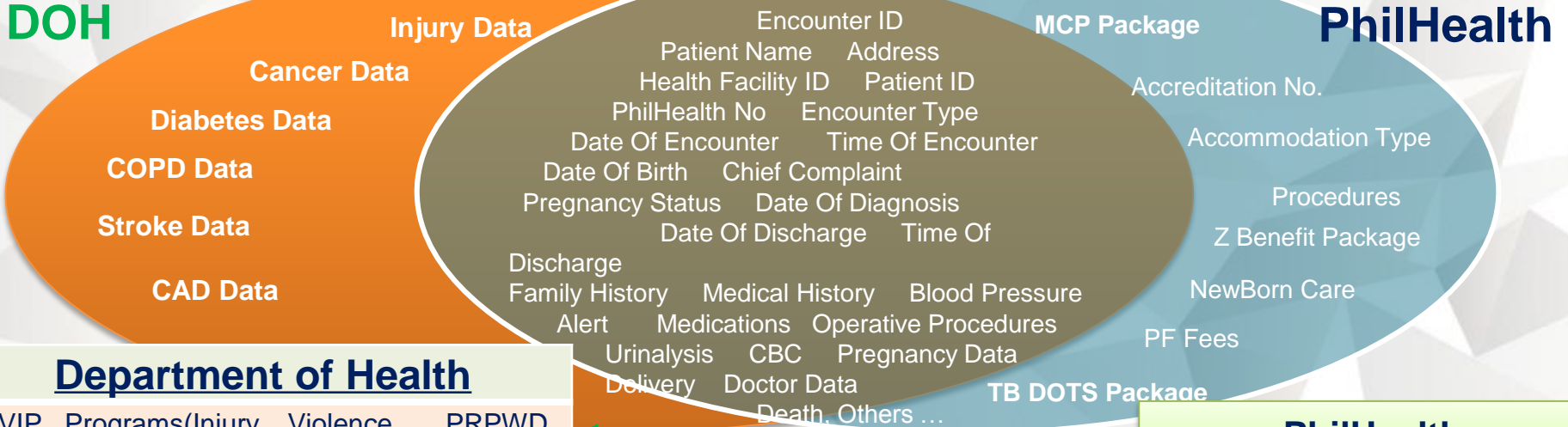
As of July 31, 2017

EMR	Number
CHITS	172
eHatid LGU	30
iClinicSys	1,005
SegRHIS	19
SHINEOS+	34
WAH	156
<b>Total</b>	<b>1,416</b>

Approximately 55%



# DOH-PHILHEALTH DATA INTEGRATION/HARMONIZATION



## Department of Health

## PhilHealth

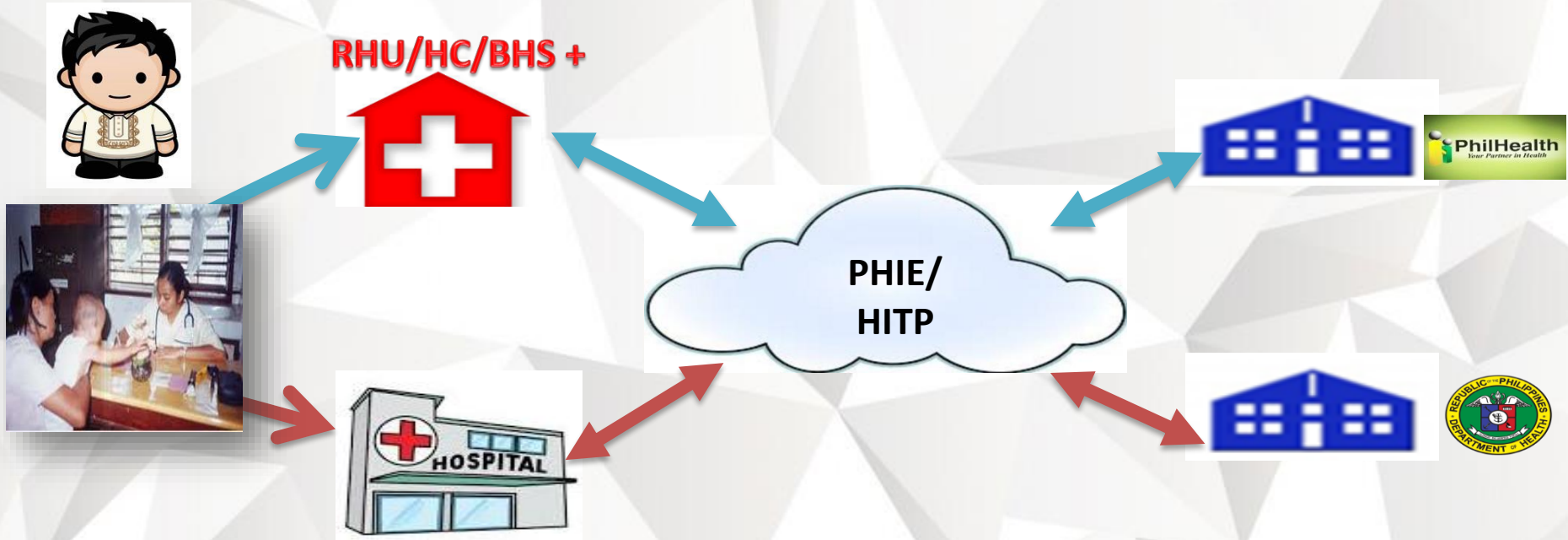
## Benefit Packages

## HITP / EMR Systems

- VIP Programs(Injury, Violence , PRPWD, VAWC)
- Chronic Non-Communicable Diseases (Diabetes, COPD, Cancer, Stroke...)
- TB,Malaria,Schistosomiasis, Filariasis, Leprosy, Viral Hepatitis
- Environmental Program
- Stock Inventory



# Current eHealth/EMR Implementation

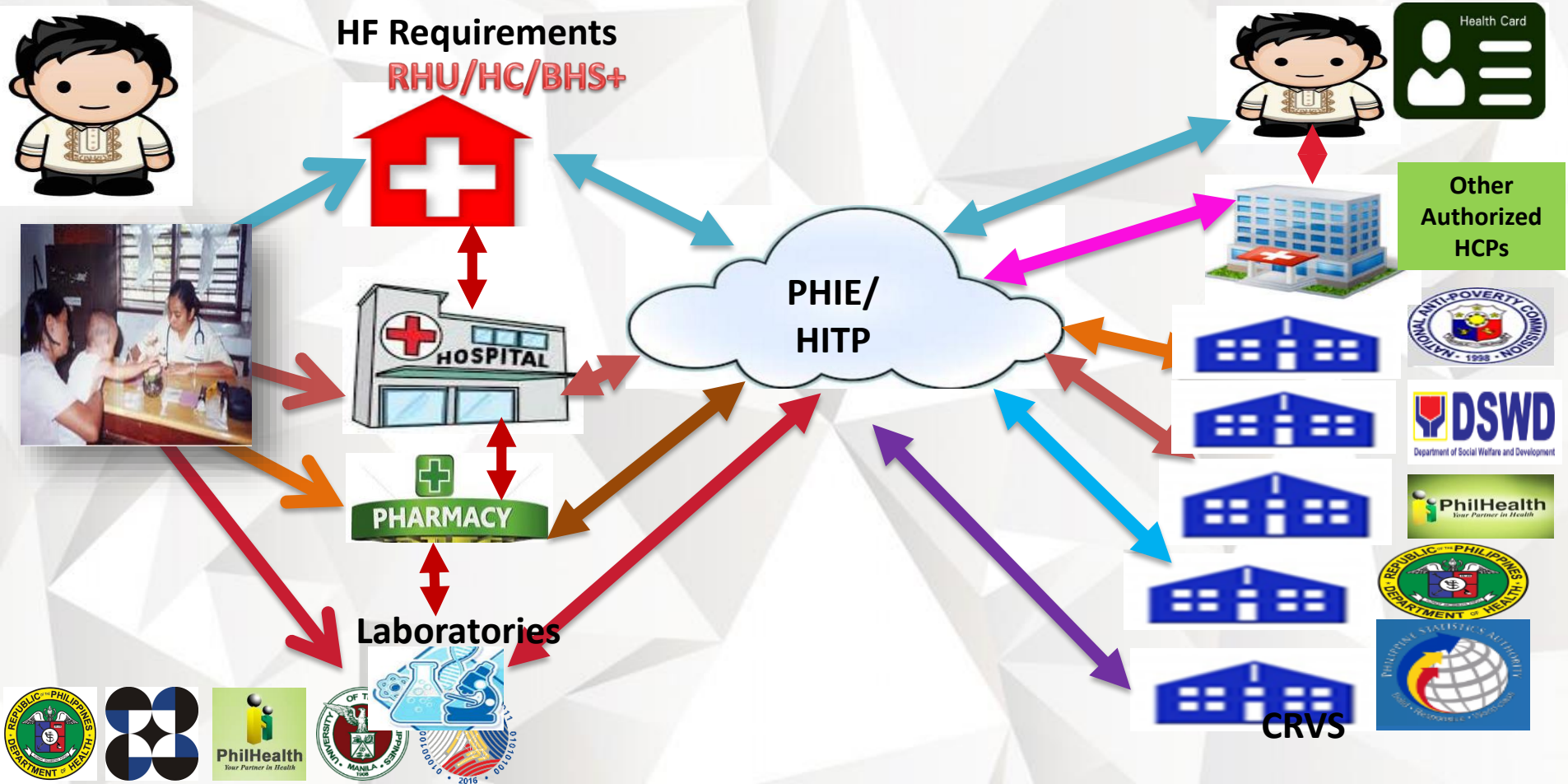


*\*PHIE - Phil. Health Information Exchange  
HITP - Health Information Technology Provider*





# Future eHealth/EMR Implementation

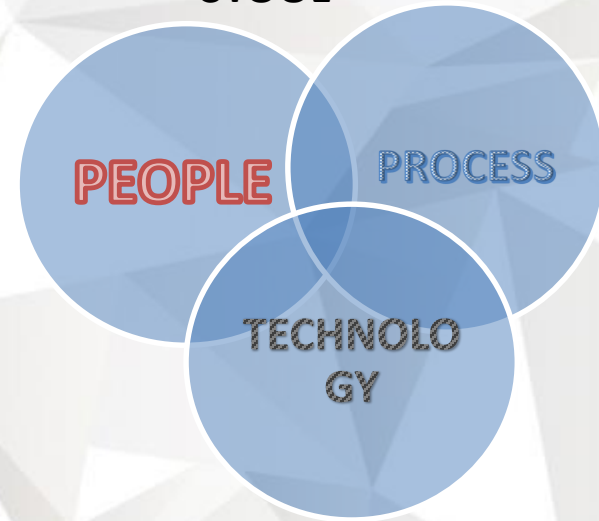


# Practice areas affecting EMR implementation

- Leadership
- Provider engagement
- Workflow
- Individual and Institutional Capability Building/Training
- Data and user interfaces, including health privacy

*"Man is still the most extraordinary computer of all."  
- John F. Kennedy*

THREE-LEGGED  
STOOL



Source: McCarthy, C. & D. Eastman (2010) 'Change management strategies for an effective EMR implementation,' HIMSS, Chicago



# Major Challenges

- **Network Connection / Connectivity**
  - No connection in remote areas
  - Slow connection
- **Resource Requirements**
  - Hardware/Server
  - Operating Expenses
  - Manpower
- **System Acceptance**
  - Usability of the System / Benefits to Users

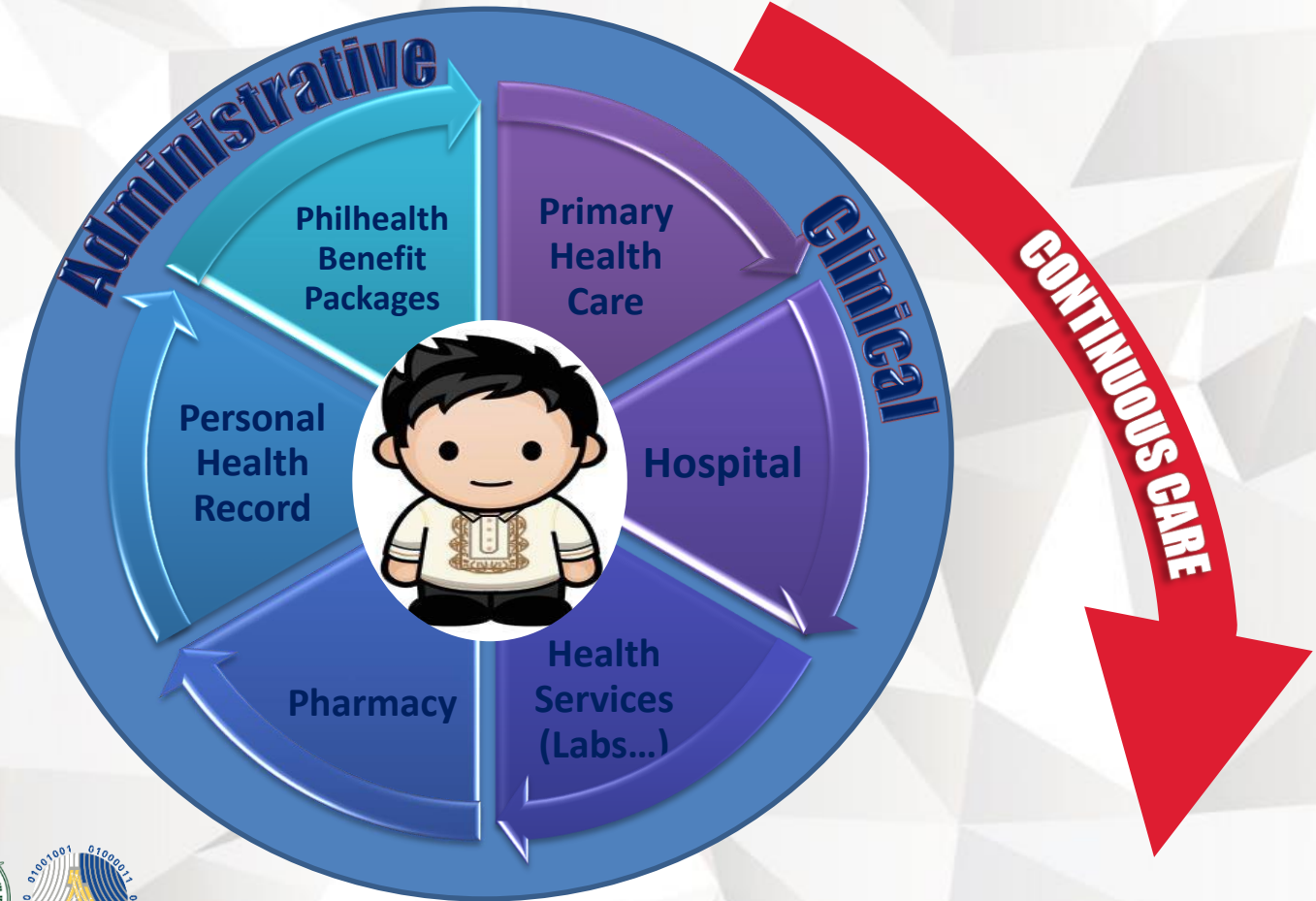


# Major Challenges

- Robust and secured infrastructure to enable data sharing / exchange / interoperability
- Data Security and Privacy (Institutions/Health Care Providers are reluctant to share data because of privacy concerns → possible use of blockchain technology)
- System Maintenance/Sustainability
- Data Quality
- Data Analysis for formulation of policies and continuing improvements



# Ultimate goal is Integrated Patient Care



# Thank You!!!

[www.ehealth.doh.gov.ph](http://www.ehealth.doh.gov.ph)

