



# Early Lessons in integrating health information systems to achieve Universal Health Coverage in the Philippines

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"Integrated Health Information System is crucial in realizing Universal Health Coverage and managing health data vital in improving and integrating the health care system."



# Public health facilities in the Philippines use several electronic medical records (eMR) systems, which present both opportunities and challenges in collecting health data.

Differences in terminology, data elements, and structures across platforms hinder the Department of Health (DOH) and PhilHealth from harmonizing data for evidence-based decision-making.

Issues such as poor data recording, processing, and transfer, particularly in rural areas where paper-based administration is still common, further complicate matters.

Additionally, the country's poor internet infrastructure, characterized by low access, high costs, and slow broadband speeds, hampers digital readiness and the adoption of scalable, high-tech health solutions.



# **Objective**

This paper aims to document the experience and feedback of LGUs in the integration of local health information at the primary care level.

# Significance of the Study

Paper can aid **policy makers** and **technical assistance providers** to examine the process of integration of health information system and review collaboration mechanisms.

# **Scope and Limitation**

- Study's discussion is limited to the integration process using eMR platforms at the public primary care facilities in predetermined ZFF areas in Luzon, Visayas, and Mindanao
- Primary data from medical health officers and primary care personnel in 20 LGUs



**PLATFORM** 

**IMPLEMENTATION** 

DATA MANAGEMENT PROCESS

HEALTH INFORMATION
USE AND DISSEMINATION

LOCAL EXPERIENCE

#### **COMMON FEATURES:**

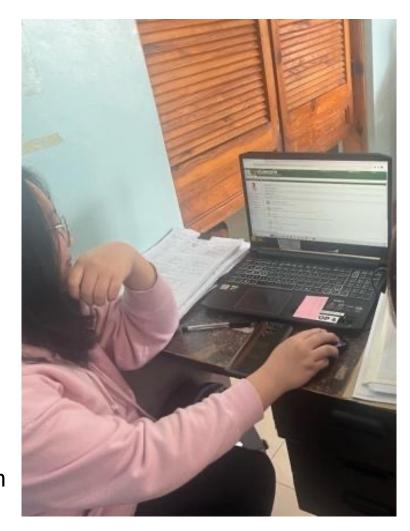
- Electronic health records
- Health commodities logistics management information.

#### **eMR ACCESS VARIES:**

- some offer individual account
- others offer per facility account (shared)

#### **TECHNICAL SUPPORT:**

- all receive technical support
- response time vary from within the same day to up to a month





**PLATFORM** 

#### **IMPLEMENTATION**

DATA MANAGEMENT PROCESS

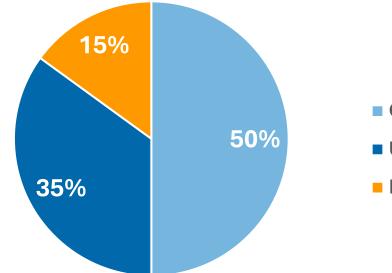
HEALTH INFORMATION
USE AND DISSEMINATION

LOCAL EXPERIENCE

#### **MAIN USERS:**

- Municipal Health Officers
- Nurses
- Midwives

#### **BUDGET SUPPORT**



- Clear and existing
- Unclear availability
- No available fund support



**PLATFORM** 

**IMPLEMENTATION** 

# DATA MANAGEMENT PROCESS

HEALTH INFORMATION
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LOCAL EXPERIENCE

#### **DATA COLLECTOR:**

- Municipal Health Officers/ Rural Health Physicians
- Nurses
- Midwives

#### **COLLECTION METHOD:**

- Paper-based and Digital
- 30% of respondents rely on paper-based collection

#### **VALIDATION PROTOCOL:**

• 60% of respondents is not established despite available guidelines

#### **DATA STORAGE:**

 Various data storage is available but 20% of LGUs still use desktop/computer units to store their collected data.

#### REPORT GENERATION AND DATA CONSOLIDATION

All main platforms generate three common reports and consolidated at the municipal and provincial levels.



**PLATFORM** 

**IMPLEMENTATION** 

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#### **UTILIZATION OF HEALTH DATA:**

- Reports are used to comply with monthly and DOH reporting requirements
- Only 50% use the information for clinical decision-making.



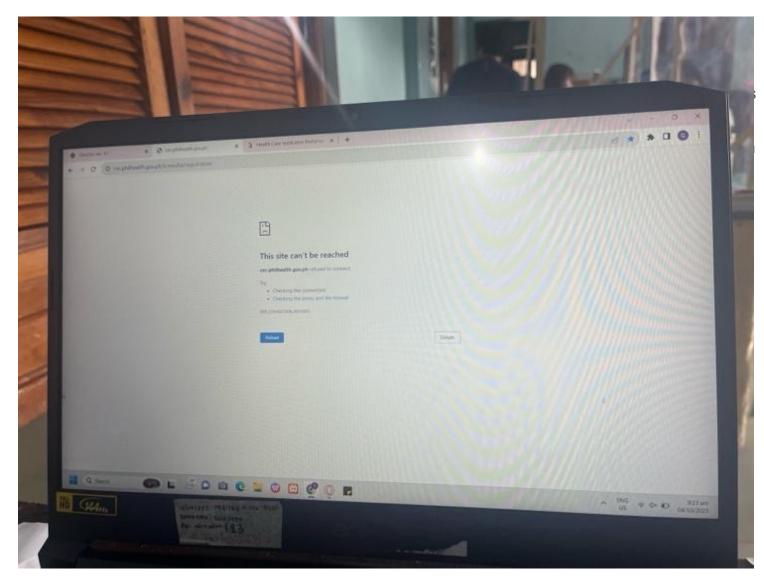
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#### **RECOMMENDATIONS OF RESPONDENTS**

#### For system developers

- Improve systems features and use
- Link with other platforms
- Explore offline option

#### For providers

- Conduct "full and hands-on" training for users
- Provide real-time response to users' queries

#### For local governments

- Upgrade of ICT equipment
- Register all constituent in the system
- Clarify roles and accountability of eMR users

#### For National Government agencies

- Work together to develop a more responsive eMR system
- Create a "unified eMR system"



## **Conclusions**

- Health information governance at the national level must shift to a more facilitative administration to address health information system fragmentation.
- Roles of national health agencies and regulatory agencies for data governance and ownership (DOH, PhilHealth, DICT, etc.) must be clarified.
- The **reforms require a whole-of-nation approach**, where public and private sectors collaborate and invest in upgrading of technology, human resources, and ICT infrastructure.
- Align these reforms with the broader context of the Universal Health Care (UHC) Law to
  ensure that health information systems will function as an integration point for the management of
  province/city-wide health system, allowing for the efficient management of healthcare provider
  networks, service delivery improvements, and health workforce management.



## Recommendations

**National DOH - Hasten the implementation** of National Health Data Repository framework and **consider harmonization** of all iHIS related policies

National and Local DOH Intensify public-private collaboration

National DOH Improve implementation of current policies

Ensure **portable health data throughout the health system** adhering to data privacy laws

**Academe** for **future researchers** to consider classification of LGUs (geographic, iHIS maturity, and level of eMR)



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