

# Asia Pacific Electronic Health Record Conference 2016

## *Electronic Health Record Sharing System of HK*



# Development Path of eHR Sharing in HK

1995

**CMS**

eHR sharing  
among public  
hospitals  
(since 2000)

2006

**PPI-ePR**

One-way eHR  
sharing from  
HA to private  
healthcare  
providers

2016

**eHRSS**

Two-way eHR  
sharing  
among public  
and private  
healthcare  
providers

# eHRSS launched on 13 March 2016



# Stage 1 eHR Programme

- Public consultation in 2008
- Obtained \$702M from Legislative Council to implement the stage 1 programme
- The major targets of stage 1 are :
  - (a) set up a sharing platform for connecting all participating healthcare providers;
  - (b) make available in the market eHR systems for private healthcare providers to use and connect to the platform; and
  - (c) prepare a dedicated legislation for protecting data privacy and system security

# eHRSS Challenges

- Clinical Usability
- System security and patient privacy
- Technical Readiness of Private Healthcare Providers
- Buy-in and recruitment of patients and private healthcare providers

# Challenge #1: Clinical usability

## *The challenge:*

- The development and operation of eHRSS require **clinical expertise not ready possessed by IT vendors in private sector**

## *Our approach:*

- **Engage HA as technical agency**
  - Largest healthcare provider in Hong Kong
  - Rich experience and expertise from CMS implementation

# Challenge #2: System security and patient privacy

## *The challenge:*

- Ensure system security and patient privacy to instil public confidence in eHRSS

## *Our approach:*

- Legal framework: new eHRSS Ordinance
- 'Need-to-know' and 'Patient-under-care' principle
- Code of Practice
- Participant information notice
- System design
- Security incident preparation

Need-to-know



# Challenge #3: Technical readiness of private Healthcare Providers

## *The challenge:*

- In private healthcare sector, health data are kept by different providers **individually** and in **different forms** (e.g. paper / local ehr system)

## *Our approach:*

- **CMS Adaption Modules** for private hospitals
- **CMS On-ramp** for private clinics
- **eHR Service Provider Training Scheme**
- **Partnership projects** (e.g. with **HKDA** and **HKMA**)
- Provide **free hardware** (e.g. ID card reader, security token) **and software**

# Challenge #3: Technical readiness of private Healthcare Providers

## *The challenge:*

- **Health data** of private sector healthcare providers are **not standardized**

## *Our approach:*

- **Data standardization** – Develop the Hong Kong Clinical Terminology Table (HKCTT)

# Challenge #4: Promotion and recruitment

## *The challenge:*

- Attract and recruit participants in eHRSS, which is voluntary in nature

## *Our approach:*

- **User friendliness:**
  - studied existing clinical practices
  - conducted user acceptance test
  - engage stakeholders for suggestions

# Challenge #4: Promotion and recruitment

## *The challenge:*

- Attract and recruit participants in eHRSS, which is voluntary in nature

## *Our approach (cont'd):*

- **Publicity:** TV & radio announcements, training videos, press release, souvenirs, promotion at Gov.HK/DH/HA websites, booth at HA Convention, launching ceremony



# Challenge #4: Promotion and recruitment

## *The challenge:*

- Attract and recruit participants in eHRSS, which is voluntary in nature

## *Our approach (cont'd):*

- Easy **pre-registration arrangement** for existing PPI-ePR participants
- **Multiple means for patients to register** – in person, online, post, fax, drop-in-box.
- **Mobile teams** to public hospitals / clinics and elderly homes
- **Reasonable transitional period** for existing PPI-ePR users
- Transitional arrangement **no less than 2 years** and will **review in the 3rd year of eHRSS operation**

# Challenge #4: Promotion and recruitment

*Two-way sharing under eHRSS brings greater benefits than one-way sharing under PPI-ePR*

- More comprehensive records
- Building blocks of patients' life-long health records
- Continuity of care of patients

To a greater extent:

- Reduce the risk of medication error
- Alert on possible drug allergy
- Save time and effort for unnecessary duplicating tests

# Challenge #4: Promotion and recruitment

## *The challenge:*

- **Influx of applications from Healthcare providers within a short period of time**
- **Missing documentary proof from healthcare providers → Extra time needed for vetting**
- **Difficult to identify a time convenient for the healthcare providers to set up the technical connection with eHRSS**

## *Our approach:*

- **Redeploy more manpower** to follow up the outstanding applications
- **Streamline** application procedures

# Stakeholder engagement

- Important across all stages
- Well-established advisory structure
  - eHR Steering Committee and its Working Groups



# Stage 2 eHR Programme

- Encouraging response for **Stage 1 eHRSS** →  
**180,000 healthcare recipients registered**
- Stage 2 Scope
  - Sharing of **radiological images** and **Chinese Medicine information**
  - Enhancement of **patient's choice**
  - **Patient portal**
- Seek funding from the LegCo in 2016/17

# New challenges ahead

- **Enhancing patient choice over data sharing**
  - Patient safety VS Patient's autonomy
- **Developing patient portal**
  - Functionalities
  - System security, use of mobile device
- **Sharing of Chinese medicine information**
  - Standardization



<http://www.ehealth.gov.hk/>

Thank you