

# Hospital Authority Convention 2016

## *Electronic Health Record Sharing System of HK – from Planning to Commencement of Operation*



**Food and Health Bureau**  
The Government of the Hong Kong Special Administrative Region



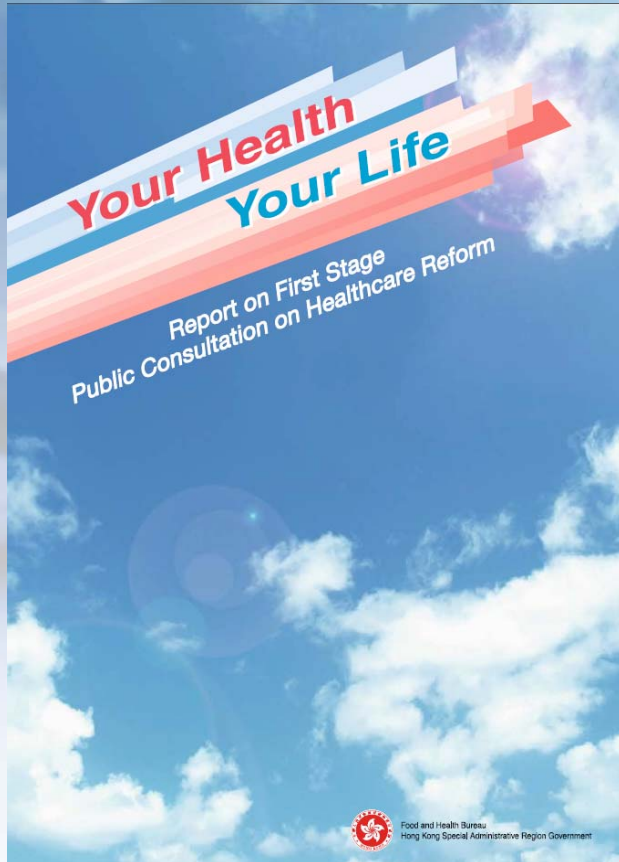
# 21<sup>st</sup> Century Health Challenges

1. Aging population
2. Rising expenditure
3. Resources constraints
4. Higher public expectation
5. Quality and safety
6. Efficiency improvement
7. Technological advancement

# eHealth – WHO Definition

*eHealth is the cost-effective and secure use of information and communications technologies in support of **health and health-related field***

# HK's Electronic Health Record Sharing System (eHRSS)



***“Your Health Your Life” (2008) - Government take the lead in the development of the infrastructure for sharing electronic health records in both the public and private sectors***



# Updates on eHRSS

*Launched on 13 Mar 2016*

*As at 30 Apr 2016:*

- ✓ More than **100 000** members of the public joined
- ✓ **HA, Department of Health** and all **11 private hospitals** joined
- ✓ **Completed registration** process for **170 private HCPs** and **opened user accounts** for **1 100 private healthcare professionals**

**UPDATE**

# Development Path 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

# Public Private Interface – Electronic Patient Record Sharing Pilot Project (PPI-ePR)

- One-way sharing pilot scheme launched in 2006
- Testing the concept, workflow and relevant technologies of eHR sharing
- Participating private healthcare providers could view HA's patients records with patients' consent
- Around 400,000 participating patients and 3,000 participating healthcare professionals



# Two-way eHRSS better than One-way 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



# eHRSS development roadmap

- Two-stage development
- Stage One capital funding: \$702 million
- Stage One objectives:
  - Set up a sharing platform for connecting all participating healthcare providers
  - Make available in the market eHR systems for private healthcare providers to use and connect to the platform
  - Prepare a dedicated legislation for protecting data privacy and system security
- System launched on 13 Mar 2016



# eHRSS Challenges

- Clinical Usability
- System security and patient privacy
- Technical Readiness of Private Healthcare Providers
- Engagement and participation of patients and private healthcare providers

# 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

# 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





# Technical readiness of private Healthcare Providers

## *The challenge:*

- In private healthcare sector, health data are kept by different providers **individually** and in **different forms**

## *Our approach:*

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

# 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)

# Engagement and Participation

## *The challenge:*

- Attract and recruit voluntary participants in eHRSS

## *Our approach:*

### ➤ **User friendliness:**

- studied existing clinical practices
- conducted user acceptance test
- engage stakeholders for suggestions

# Engagement and Participation

## *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





# Engagement and Participation

## *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
- **Distinguishing** PPI-ePR and eHRSS
- Reviewed and **streamlined applications procedures** for healthcare providers

# Stakeholder engagement

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



# Looking Ahead – Stage 2 eHRSS

- Scope
  - Sharing of **radiological images** and **Chinese Medicine information**
  - Enhancement of **patient's choice**
  - **Patient portal**
  
- Seek funding from the LegCo




**醫健通**  
 電子健康紀錄互通系統  
 Electronic Health Record Sharing System

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Thu 28 April, 2016  28°C 74% (11:30 am)
 AQHI: General Low to Moderate | Road Moderate

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 Electronic Health Record Sharing System - Elderly

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

Thank you



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