Legal, Privacy and Security Framework for eHealth Record (eHR)



eHealth Record Office Food and Health Bureau



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Background

- First Stage Public Consultation on Healthcare Reform (2008):
 General public support for developing eHR Sharing
- Funding approved by Finance Committee (2009): HK\$ 702M for implementing 1st stage of eHR Programme
- Working Group on Legal Privacy and Security Issues:
 To engage stakeholders and relevant parties, including the Office of the Privacy Commissioner for Personal Data (PCPD), patients' groups, healthcare providers, etc. in formulating the Framework



Benefits of eHR sharing

For Clinicians

- ✓ Improved availability and transparency of information shared between the public and private sectors
- ✓ Efficient clinical practice
- ✓ Efficiency gains by avoiding the need to store, collate and transfer paper records

For Patients

- ✓ Reduced medication errors
- ✓ More efficient and effective use of diagnostic tests
- √ Timely treatment
- ✓ Improved accuracy of diagnosis and disease management

For Healthcare System

- ✓ More efficient and better quality healthcare
- ✓ Better disease surveillance
- ✓ Support public health policy making



Development Progress

- Pilot projects to allow patients and healthcare providers to experience eHR sharing
- Formulation of the blueprint for the eHR Core Sharing Infrastructure and the Clinical Management System Extension Components
- eHR Standardisation
- eHR Engagement Initiative and Partnership Projects with Professional Bodies
- Promotion and publicity



Need for an eHR-specific legislation

- Personal Data (Privacy) Ordinance (PDPO) (Cap. 486) - general safeguards for personal data privacy
- Overseas -
 - Canada and Denmark have health information specific legislation
 - → Australia introduced a new eHR-specific Bill in late 2011 after public consultation
- eHR Sharing unique functions of the System, speedy transmission of sensitive health data



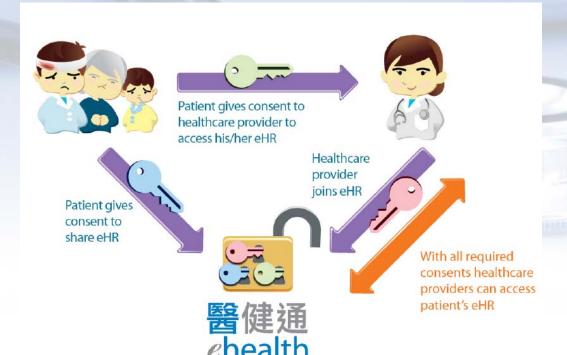
Key Concepts and Principles

- Voluntary participation
- "Patient-under-care" and "need-to-know"
- Pre-defined scope
- Identification and authentication of patients, healthcare providers and professionals
- Government-led
- Patient privacy and needs of healthcare providers
- Versatile and technology neutral



Basic model of eHR Sharing

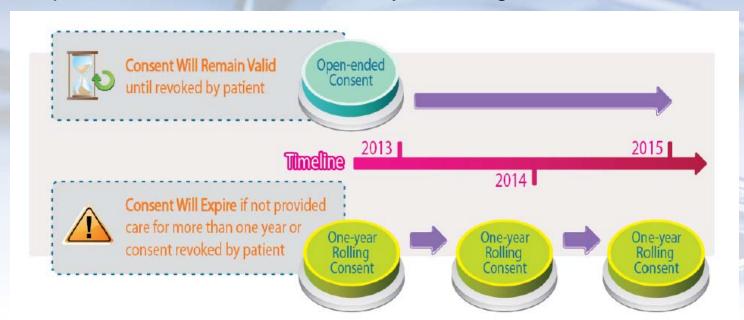
- Patient
 - Express and informed consent
 - Patient information notice, consent form
- Healthcare provider
 - Patient-under-care and need-to-know
 - User agreement





Patient's consent

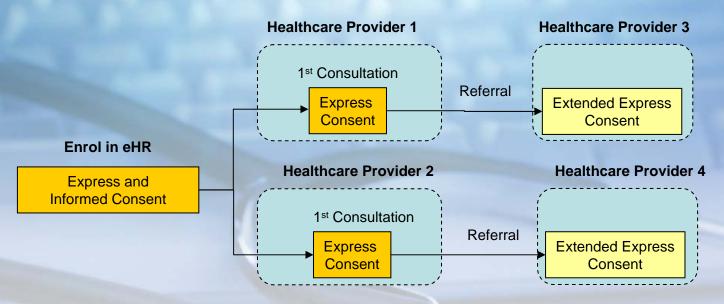
- eHR Sharing System Operating Body (eHR-OB)
 - Consent to Hospital Authority and Department of Health is part and parcel of patient's participation
- Individual healthcare providers
 - Open-ended until revocation or 1-year rolling



- Referral
 - In line with existing practice



Patient's consent



Substitute decision makers (SDMs)

Minors (below 16)

Parent

Mentally Incapacitated Persons (MIPs)



Guardian

Patients who cannot give informed consent (e.g. elderly)



Immediate Family Member

No other SDMs





Minors

- Interpretation and General Clauses Ordinance (Cap.1): A person who has not attained the age of 18
- Parent and Child Ordinance (Cap.429): The consent of a minor who has attained the age of 16 years to the taking from himself of a bodily sample shall be as effective as it would be if he were of full age
- Overseas Reference: The age for granting effective consent in Australia, Ontario (Canada) and the United Kingdom ranges from 14 to 16
- Gillick Test: Applied in cases where a minor intends to give consent in the absence of an SDM, or is in dispute with his/her SDM on sharing of his/her eHR

Exemptions

for emergency access in line with S.59 of PDPO

Withdrawal/Expiry of Consent

"Frozen" eHR

- not be available for access
- remain in the System for a specified period before de-identification
 - Withdrawn Patients' eHR: three years
 - Deceased Patients' eHR: 10 years



eHR Sharable Scope

- (i) Only data necessary and beneficial for the continuity of healthcare
- (ii) No safe deposit box / exclusion

Phase 1		Later phases
Person demographics	Procedures	Assessment / physical exam
Referrals	Medication	Social history
Episode summary	Immunisation	Past medical history
Adverse reactions / allergies	Encounters	Family history
Problems	Radiology results	Clinical request
Laboratory results		Care and treatment plan



Use of eHR data

- Primary use
 Enhance the continuity of care for patient
- Secondary use
 Public health research and disease surveillance
 - non-patient identifiable data: approved by eHR-OB
 - patient-identifiable data:
 approved by the Secretary of Food and Health on recommendation by a research board



Data Access and Correction

- eHR-OB will comply with Data Access Request / Correction Request by
 - subject patients
 - parents of minors, and
 - guardians of MIPs
- Data Correction
 - either by healthcare provider on his own initiative or on request (with track and trace)
- Editing Person Master Index
 - patient's consent is required



Complaint and review

 With reference to PDPO and overseas experience, we will formulate a mechanism to initiate review and resolve complaints arising from eHR sharing under the Framework

Sanctions

- Existing legislation which criminalises unauthorised access to, and dishonest use of computer systems includes:
 - Telecommunications Ordinance (Cap.106, S.27) (\$20,000 fine)
 - Crimes Ordinance (Cap.200, S.161) (5-year imprisonment)
- New criminal offences
- Innocent errors in inputting eHR data or other unintentional contraventions in the delivery of healthcare will <u>not</u> be criminalised
- Civil remedies under PDPO



Security, Certification and Audit

- Code of Practice and guidelines
- Security audits on
 - (a) electronic medical/patient record systems;
 - (b) eHR Sharing System
- Authentication and role-based access control
- Network security mechanisms
- Non-repudiation
- Data validation
- Data encryption
- Restricted downloading
- Access notification
- Access logging
- Privacy and security breaches



Key Milestones

- Public Consultation (Dec 2011 – Feb 2012)
- Preparation of draft eHR Bill (2Q 2012 – 3Q 2013)
- Tabling of eHR Bill at LegCo (4Q 2013)
- Enactment of eHR Bill (Mid 2014)
- Commencement of eHR Sharing System (Mid-End 2014)





