Standards Development for Hong Kong eHR

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Discussion

- Introduction
- eHR Information Standards
- Implementation Strategy
- Drug Record Standards for eHR

Electronic Health Record

- An electronic womb-to-tomb health record comprising of all important health data about a person which can be accessed at anytime, anywhere by the authorized person.
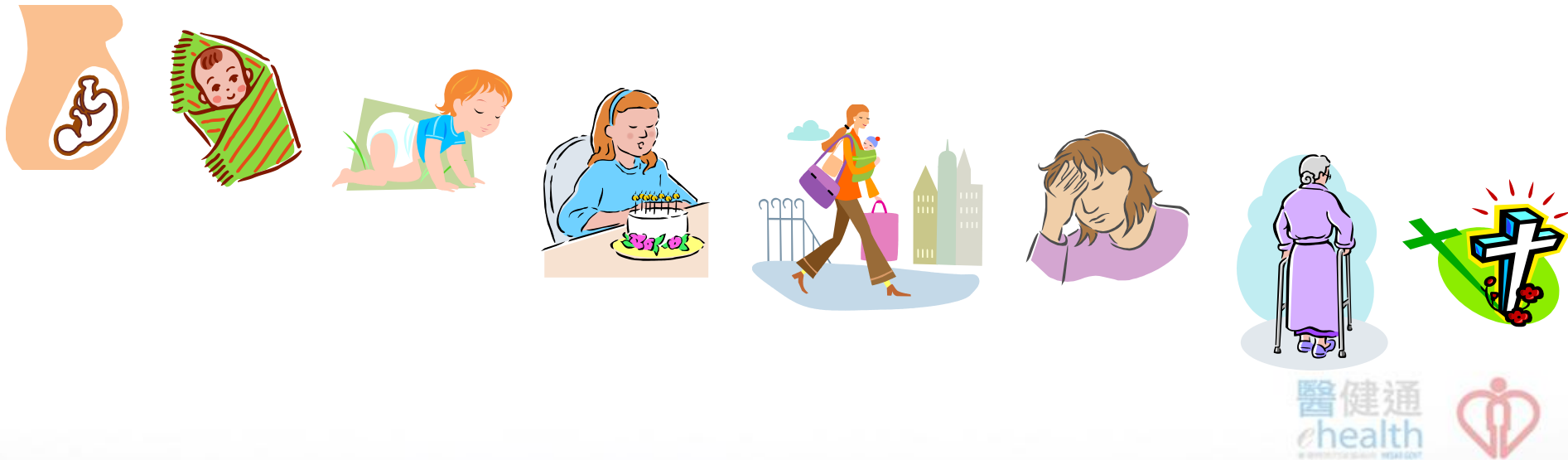
Major challenges

- Privacy

- Ownership

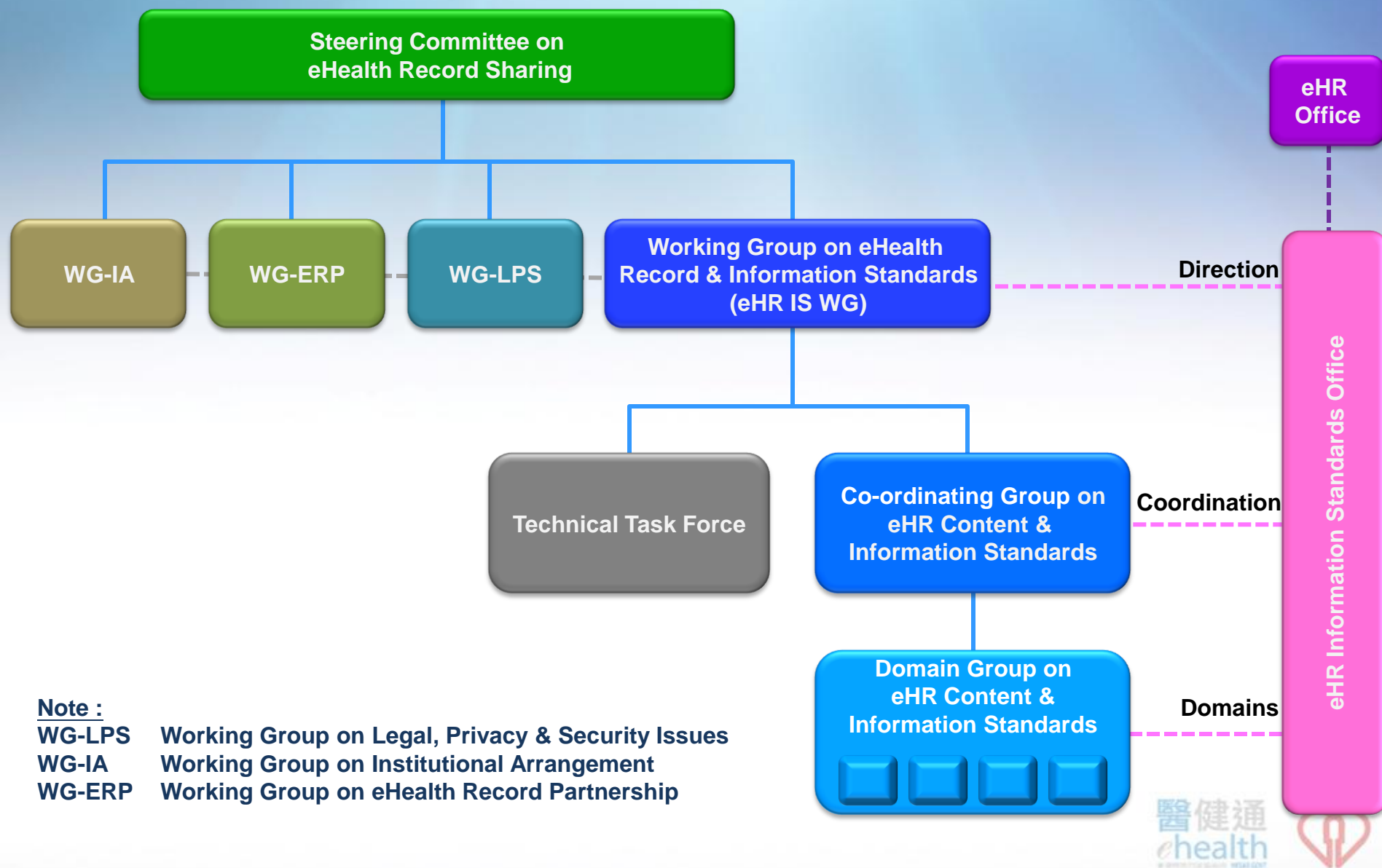- Institutional arrangements

- Financing

- Incentives

- Standards

Maintain interoperability – 'ability of two or more systems or components to exchange information and to use the information'

Source: IEEE Standard Computer Dictionary: A Compilation of IEEE Standard Computer Glossaries, IEEE, 1990
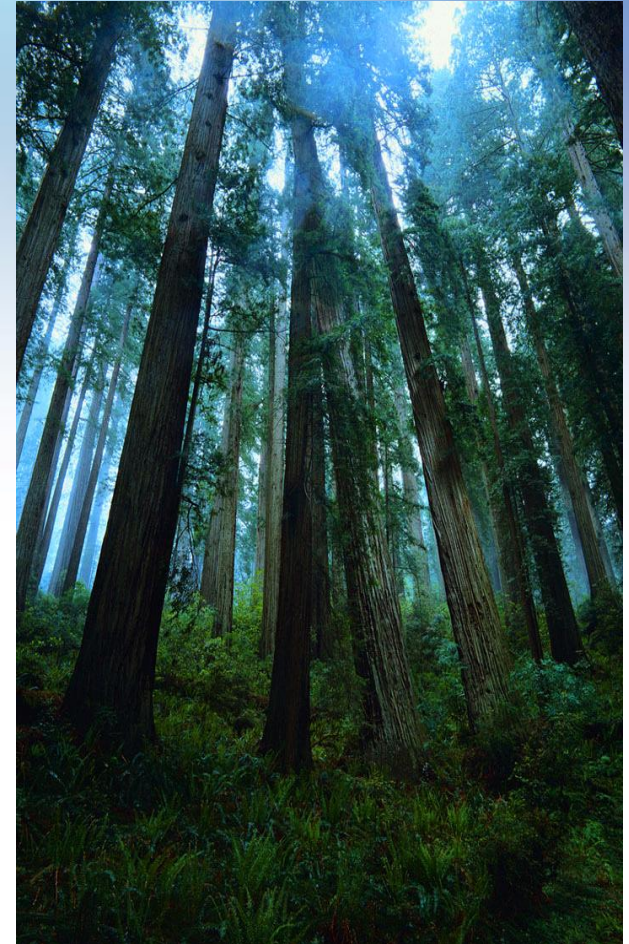
Standardisation for eHR

- Ensure accurate interpretation of health data by all parties

- Support reuse of data

- Reduce duplicated efforts in data entry

- Facilitate interoperability of systems for data captured at different platforms

- Improve efficiency of healthcare services

- Assist in protection of public health

Organisation Structure for eHR Information Standards

Steering Committee on eHealth Record Sharing

eHR Office

WG-IA

WG-ERP

WG-LPS

Working Group on eHealth Record & Information Standards (eHR IS WG)

Direction

Technical Task Force

Co-ordinating Group on eHR Content & Information Standards

Coordination

Domain Group on eHR Content & Information Standards

Domains

eHR Information Standards Office

Note :
WG-LPS   Working Group on Legal, Privacy & Security Issues
WG-IA   Working Group on Institutional Arrangement
WG-ERP   Working Group on eHealth Record Partnership

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Areas

- Registries
  - Patient
  - Practitioner / Institute
  - Location (address)
  - System
- eHR content
- Terminology
- Messaging
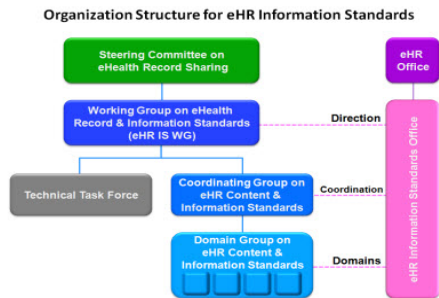- Management process

Standards Documents

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

1. **eHR Content Standards Guidebook**
   This document defines the content and the information standards for Hong Kong eHR.

   - Appendix i – eHR Contents
   - Appendix ii – eHR Codex

2. **eHR Data Interoperability Standards**
   This document aims to provide the standards of data format and communication mechanism for health care providers in Hong Kong to exchange between the health records with eHR.

Recognised Terminologies

- Compendium of Registered Pharmaceutical Products (HK Drug Compendium)

- Hong Kong Clinical Terminology Table (HKCTT)

  - Medication Vocabulary Table

- International Classification of Diseases, 10th Revision (ICD 10) **

- International Classification for Primary Care (ICPC) **

- Logical Observations, Identifiers Names and Codes (LOINC)

- Systematized Nomenclature of Medicine, Clinical Terms (SNOMED CT)

**: till 2017

Consideration

- Different pace in IT adoption amongst organisations

- Different pace in IT adoption within organisation for various datas

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Phased Approach – A Proposal

eHR Content	Level 1	Level 2	Level 3
Person			Phase 1
Healthcare practitioner			Phase 1
Encounters			Phase 1
Referral	Phase 1	Phase 2	
Episode summary	Phase 1	Phase 2	Phase 3
Adverse reactions / allergies			Phase 3
Problems		Phase 1	Phase 2
Procedures		Phase 1	Phase 2
Assessment / physical exam		Phase 4	Phase 5
Social history		Phase 4	Phase 5
Past medical history			
Family history			
Medication	Phase 1	Phase 2	Phase 4
Immunization		Phase 1	Phase 2
Clinical requests	Phase 3	Phase 4	Phase 5
Diagnostic test results	Phase 2	Phase 3	Phase 4
Care & treatment plan	Phase 3	Phase 5	

Certification

Key : Phase 1 | Phase 2 | Phase 3 | Phase 4 | Phase 5

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Hybrid Approach
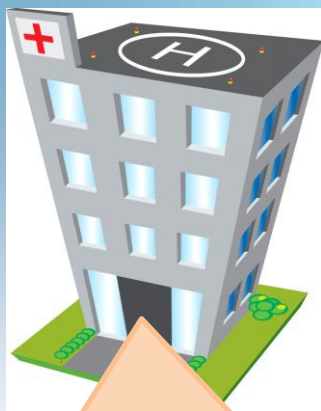
Certification Schedule

Hospital	Initial Join		Plan	
	Year	**Level**	**Year**	**Level**
Problem	2014	2	2018	3
Drug	2013	2	2018	3
Immunisation	---	---	2019	3
Allergy	2012	2	---	---
Laboratory	2012	2	2019	3
……	……	……		

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# eHR IS Domain Group on Drug Record Terms of reference

- To develop information standards on drug record to facilitates the sharing of drug data to the eHR
- To develop and refine the standard dataset for drug orders / dispensing transactions
- To define & refine the standards on adverse drug reaction records, including the appropriate standard terminology sets
- To define the scope of drug terminology table
- To define requirements of the standard drug terminology
- To develop and refine standard drug terminology with reference to international terminology
- To provide oversight for management of the drug terminology
- To develop, endorse and maintain the editorial policy for drug terminology table
- To identify implementation issues and propose solutions
- To report to eHR IS CG

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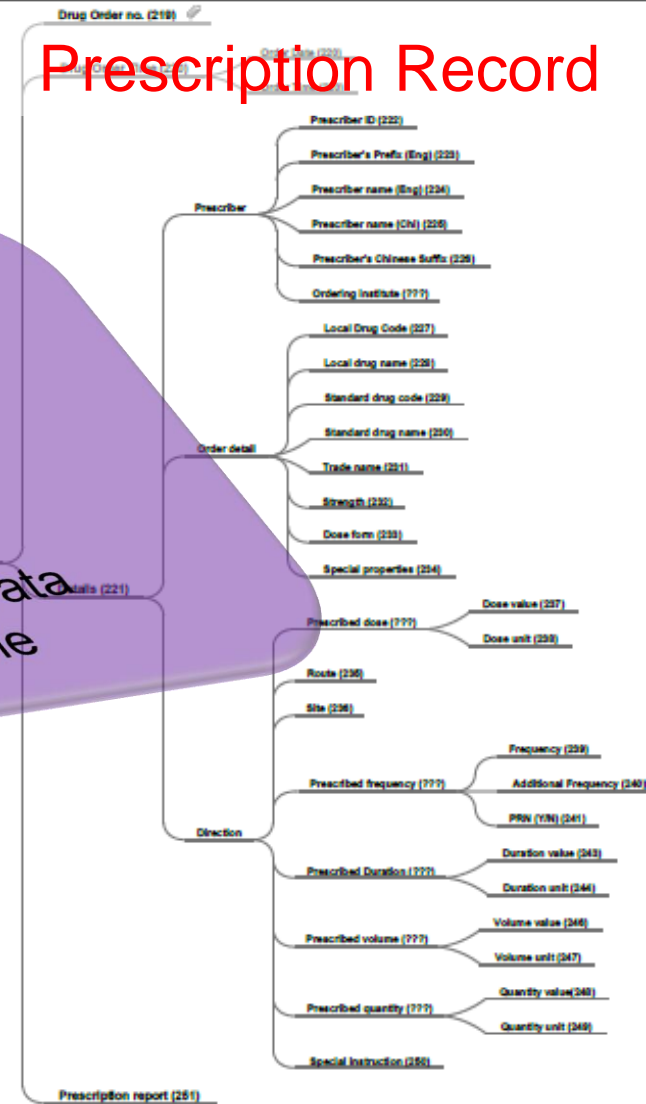eHealth

eHR IS Domain Group on Drug Record Membership

- HK Medical Association
- Hong Kong Academy of Medicine
- HK Doctors Union
- Society of Hospital Pharmacists of Hong Kong
- Hong Kong Private Hospitals Association
- Food and Health Bureau
- Department of Health
- Hospital Authority

Content – Drug Record

Dispensary Record
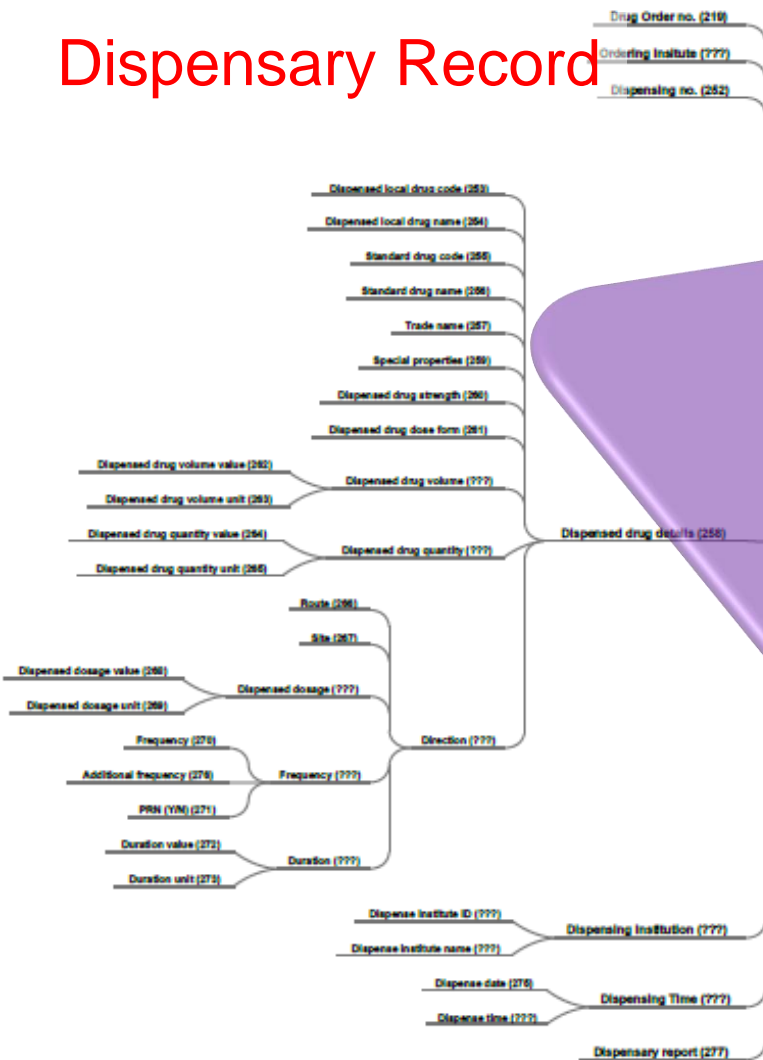
Prescription Record

Inderal (propranolol hydrochloride) oral tablet 10 mg

Further Steps

- Drug Record Content
  - Revise standards
  - eHR view
  - Content management tool
- Medication Vocabulary Table (DH, Drug com., HA, private)
  - Updating mechanism
  - Editorial guidelines
  - Mapping with SNOMED CT
  - Terminology management tool
- Message
  - Work with HL7 HK on local adaptation
  - Message standard for drug record
  - Information Portal

Thank You