

HL7 Hong Kong FHIR® Connectathon Series 2023-2024

SECOND CONNECTATHON

19 FEBRUARY 2024

EXECUTIVE RM 119, 1/F, HKPC BUILDING, 78 TAT CHEE AVENUE, KOWLOON, HONG KONG

Welcoming remarks

By Mr Alan Young (Chairman, HL7 Hong Kong)

Welcoming remarks

Topics: Allergy/ADR, Immunisation

Programme	Speaker
eHealth update	Louise Wong Health Informatics Analyst I, HA
Dataset briefing for Allergy / ADR & Immunisation	Cally Chau Health Informatics Analyst I, HA Mavis Pow Health Informatics Analyst I, HA
PMI matching rule for eHR	Erica Lau Health Informatics Analyst I, HA
FHIR mapping for Allergy/ADR & Immunisation	Michael Cheung Systems Manager, HA

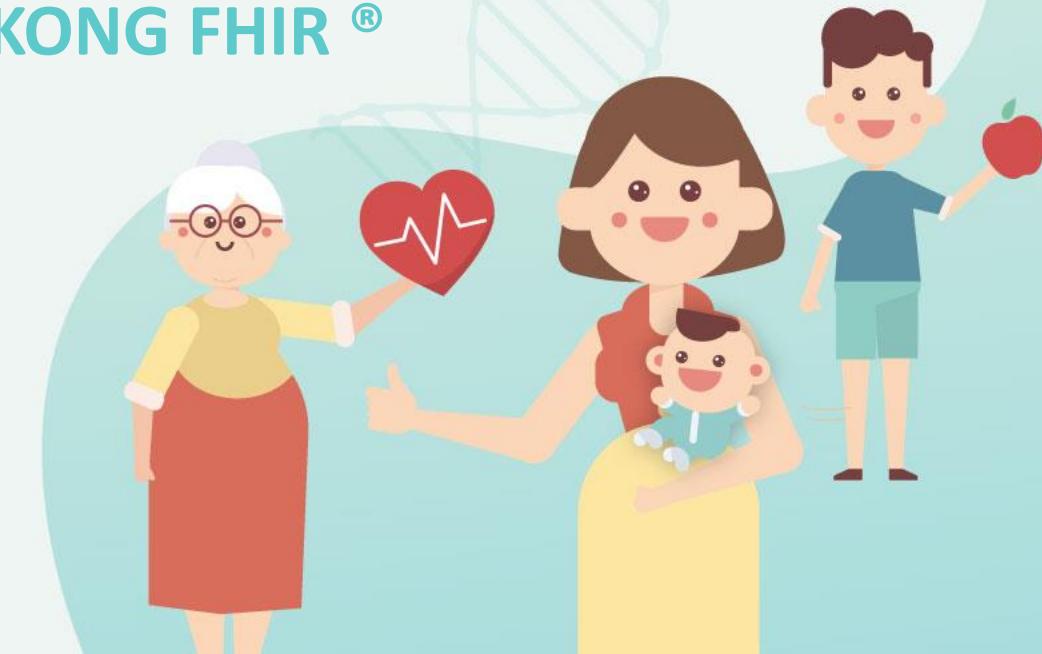
- Fully supported by Electronic Health Record Office

eHealth update

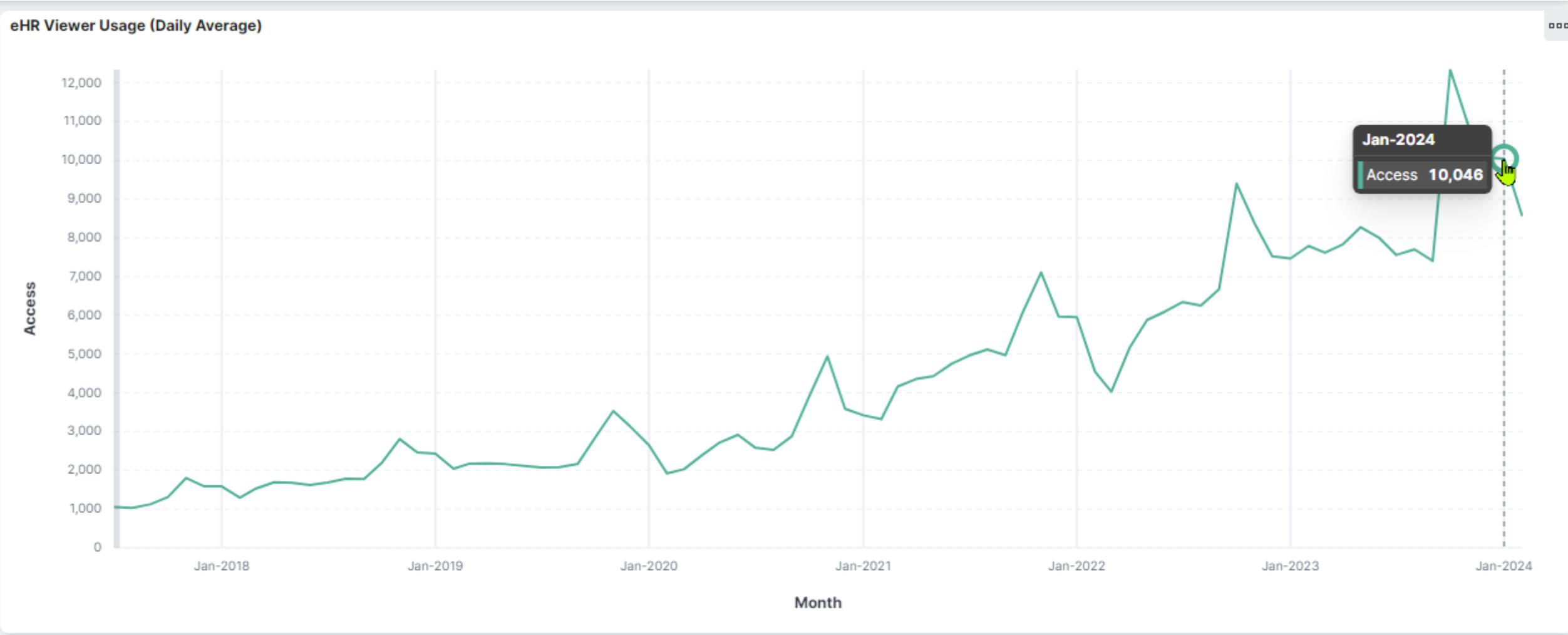
By Ms Louise Wong (Health Informatics Analyst I, Hospital Authority)

Electronic Health Record Sharing System

Second Connectathon of HL7 HONG KONG FHIR®
Connectathon Series 2023-2024
19 Feb 2023

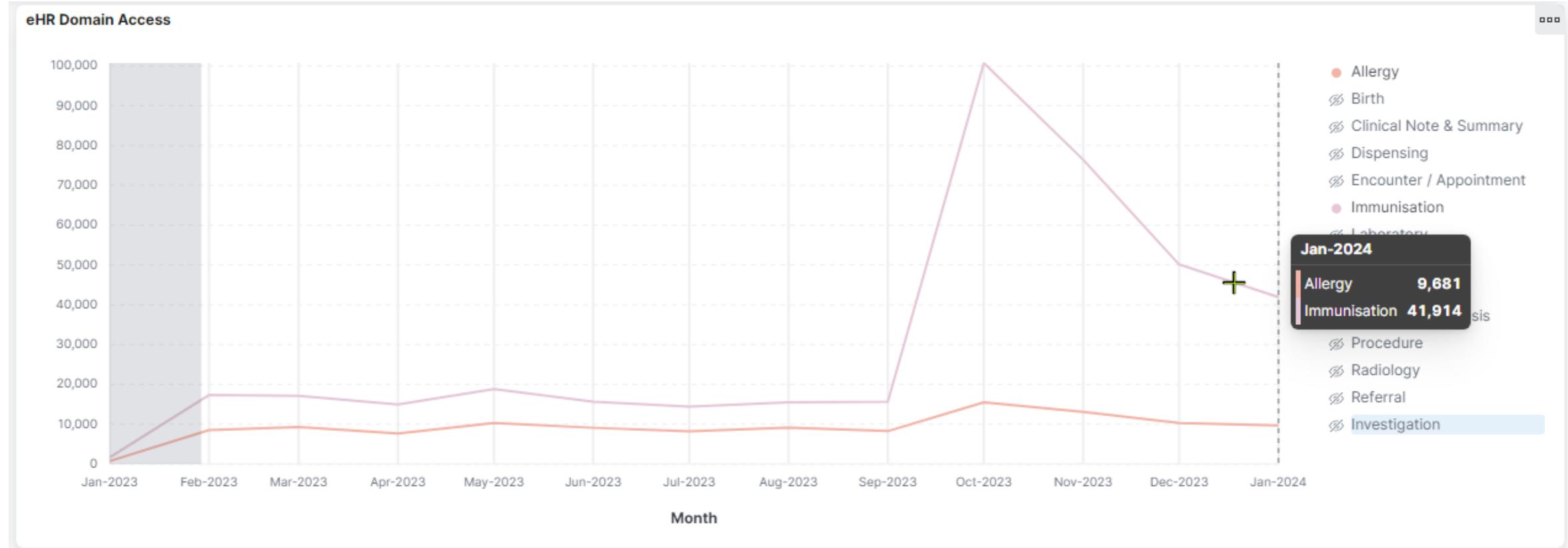


Monthly eHRSS Record Access (>10,000)



eHRSS Records Access Per Month

Allergy and Immunization Access as at 29 Jan 2024



Healthcare Professionals Participation

Healthcare Professional Registration 54,840

Nurse



Doctor



Physiotherapist



Midwife



Pharmacist



Medical laboratory technologist



Occupational therapist



optometrist



Radiographer



Dentist



Chinese Medicine Practitioner



Usage and Record Sharing

3.8B Record Shared

15 PPP programs

43 HA hospitals

2770 private clinics

12 DH services

96 NGOs

13 private hospitals

18 DHC

**26 Radiology
groups / centres***

~ 28 280 Public Private Partnership services per month
~ \$264M Elderly Health Care Voucher claim per month

* Including 0.56 B radiological images in the pilots as part of eHRSS sharing (private HCP to HA) (As of Jan 2024)

eHealth App



The landing page features a large banner at the top with two women in white coats running towards the right, set against a backdrop of a modern city skyline. A smartphone displays the eHealth app interface with various icons like 'Appointments', 'Medicine', and 'Health Management'. Below the banner, the tagline 'HEALTHY FUTURE IS WITHIN YOUR GRASP' is displayed. The main headline reads 'Managing Your Health, anytime, anywhere.' Below this, a paragraph describes the app as a one-stop access to health information and records. It includes download links for the App Store, Google Play, and AppGallery, along with QR codes for scanning.

醫健通
eHealth
香港特別行政區政府 HKSAF GOVT

Home One-stop Service ▾ Tips on Privacy Protection & Security Tutorials Free Downloads ▾ Promulgation

EN 繁 簡

HEALTHY FUTURE IS WITHIN YOUR GRASP

Managing Your Health, anytime, anywhere.

醫健通 eHealth, a one-stop access of useful health information and your health records. Leading you to better health within one click.

Download on the App Store GET IT ON Google Play EXPLORE IT ON AppGallery

Keep Track of Your Health

Amoxicillin + clavulanic acid Augmentin (Certain) Rash Last updated on 29-Aug-2015 Hospital Authority

Download Now!

QR code

QR code

QR code

10

Personal Health Information

Allergy

16:50

醫健通
eHealth

Hello SOENG, MUT LEI ➔

Allergy

Drug and Other Allergy

- Peanut
- amoxicillin + clavulanic acid

Adverse Drug Reaction

- ibuprofen

Education Information



What is allergy?
An allergic reaction is a hypersensitivity reaction initiated by the immune system to allergens enc

Vaccine

16:51

醫健通
eHealth

Hello SOENG, MUT LEI ➔

Vaccines

Please back up your vaccine records (including photo records) regularly to prevent data loss when switching to other mobile device.

+ Add My Vaccine Record

My Input

04-May-2023 hepatitis B vaccine

My Input

31-Oct-2022 hepatitis A vaccine

eHealth Record

22-Feb-2021 COVID-19 vaccine

Capture My Vaccine Card

Vaccine Card Album

Medication

16:51

醫健通
eHealth

Hello SOENG, MUT LEI ➔

Medications

Select Year

2019

30-Dec-2019 QUEEN MARY HOSPITAL

Diamicron (gliclazide) oral tablet 80 mg

Glucophage (metformin hydrochloride) oral tab...

Show More

29-Jun-2019 Healthy Clinic - Central

Diamicron MR (gliclazide) oral tablet 30 mg

Glucophage (metformin hydrochloride) oral tab...

Show More

Select Year

Appointment

16:52

醫健通
eHealth

Hello SOENG, MUT LEI ➔

Appointments

Upcoming Past

+ Add My Appointment Record

My Input

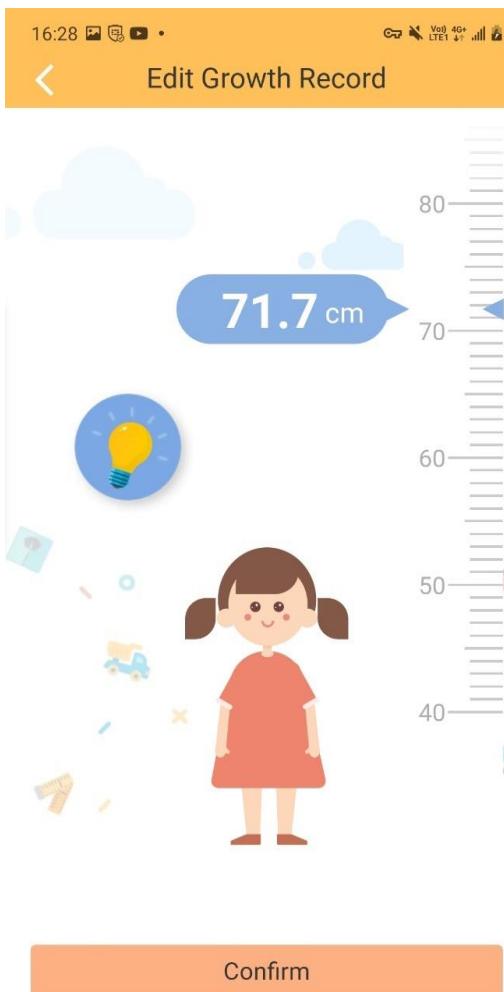
18-Sep-2023 Mon 2:15 PM

好健康醫務所 Internal Medicine Outpatient Edit

Can't find your appointment record? Please refer to our [FAQ](#).

Show cancelled appointment

Growth



Public Health Information

Public Health

7:54 4G
Health Programme
Private Healthcare Facilities (PHF) Register
PHF Register lists out information of the PHFs with valid licence / letter of exemption.

長者醫療券計劃
Elderly Health Care Voucher Scheme

Elderly Health Care Voucher Scheme

TO PREVENT COLONRECTAL CANCER
LIVE A HEALTHY LIFESTYLE
Colorectal Cancer Screening Programme
Aged 50 - 75 years

CRC Screening Programme
The Colorectal Cancer Screening Programme subsidises asymptomatic HK residents aged between...

Voucher/Quota

16:39
Elderly Health Care Voucher Scheme

Current Position

Available Voucher Balance \$0

Maximum Voucher Amount that can be used on Optometry Services \$1,000

(Based on own Voucher Balance/ sum of own and spouse's Voucher Balance and own "Available Quota on Optometry Services")

Available Spouse's Voucher Balance \$6,900

Find more healthcare professionals

Latest Claim Transaction Record

Date	Patient Name	Amount
2023-07-20	CHAN, FIVE MAN	\$0
2023-07-20	Medical Practitioner	\$1,000
2023-07-20	CHAN, FIVE MAN	\$0
2023-07-20	Spouse's vouchers	\$100

Promotion

2:47
Colorectal Cancer Screening Programme

My Screening Flow

Return FOBT Specimens
Please return the Specimens to the collection points

Find more healthcare professionals

Welcome to join the CRC Screening Programme

Screening flow

Before specimen collection - Tips

How to collect stool specimen

Returning specimens

Investigation Result

My Screening Flow

FOBT Result

Date	Result
04-Jun-2021	Negative
04-Jun-2021	Negative

The test result to be shown here is for record purpose only. There is a time lag of around eight weeks.

Find more healthcare professionals

Past CRC Screening Results

FOBT Result

Date	Result
26-Apr-2019	Negative
26-Apr-2019	Negative

Last Updated: 21-Apr-2022 7:49 PM

Reminder

9:40
Monday, June 3

醫健通 e-health now

Reminder: Please be reminded to return the FIT tubes. If you have returned the FIT tubes, please ignore this message.

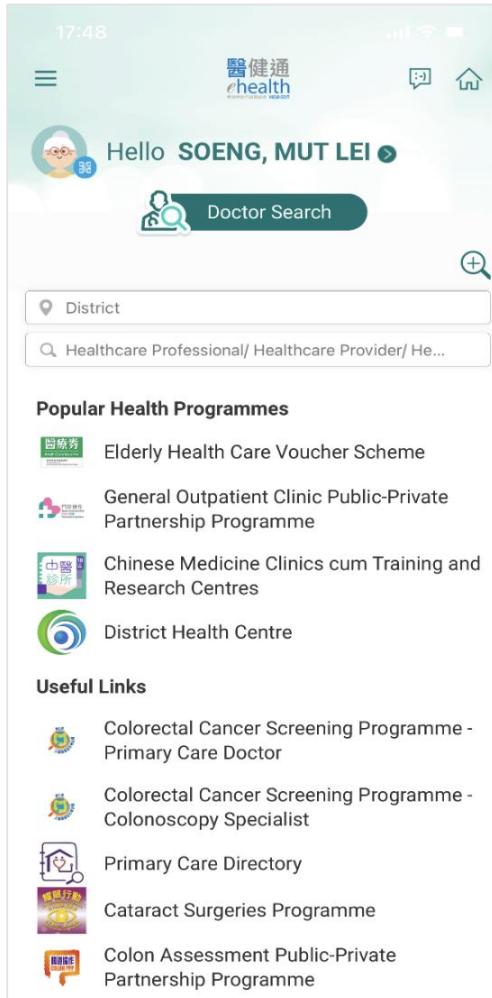
swipe up to open

Health and Self Management Resources

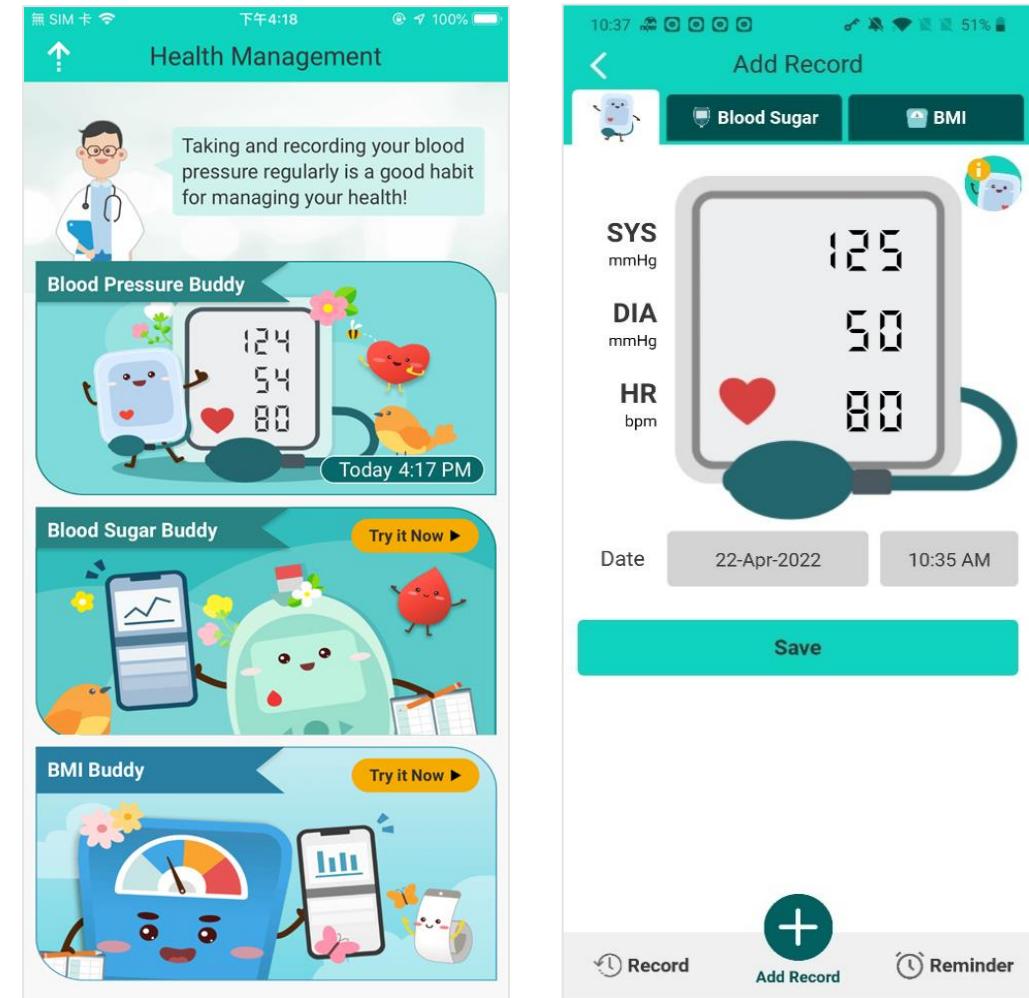
DHC



Healthcare Provider



Health Management



eHR promotion



DHC Services

Districts		Implementation	Operators
1	Kwai Tsing	17 September 2019	 葵青安全社區及健康城市協會 KWAI TONG SAFE COMMUNITY AND HEALTHY CITY ASSOCIATION
2	Sham Shui Po	30 June 2021	 聖雅各福群會 St. James' Settlement
3	Sai Kung	1 September 2021	 寶靈堂 LOK SIN TONG BENEVOLENT SOCIETY KOWLOON
4	Kowloon City	2 October 2021	
5	Yau Tsim Mong	2 October 2021	
6	Wan Chai	5 October 2021	 街道衛理中心 Methodist Centre
7	Kwun Tong	15 October 2021	 基督教聯合醫務協會 UNITED CHRISTIAN MEDICAL SERVICE
8	Tai Po	15 October 2021	
9	Islands	18 October 2021	 鄰舍輔導會 THE NEIGHBORHOOD ACTION COUNCIL
10	North	18 October 2021	 香港基督教女青年會 HONG KONG CHRISTIAN SERVICE FOR YOUNG WOMEN
11	Sha Tin	30 October 2021	 香港復康會 The Hong Kong Society for Rehabilitation
12	Central & Western	30 October 2021	
13	Eastern	30 October 2021	
14	Tuen Mun	31 May 2022	 基督教香港信義會社會服務部 EVANGELICAL LUTHERAN CHURCH SOCIAL SERVICE - HONG KONG
15	Wong Tai Sin	30 June 2022	 香港聖公會信義會有限公司 HONG KONG SHENG KUNG HUI WESLEY COUNCIL LIMITED
16	Yuen Long	24 Oct 2022	 博愛醫院 Pok Oi Hospital
17	Southern	17 Oct 2022	 香港仔坊會 AKA
18	Tsuen Wan	30 Dec 2022	 仁濟醫院 Yan Chai Hospital



地區康健中心
District Health Centre



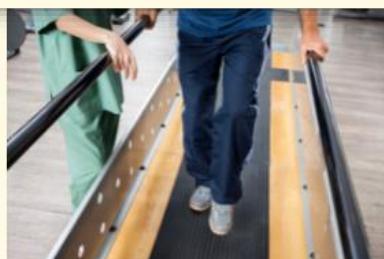
Health Promotion



Health Assessment



Chronic Disease Management



Community Rehabilitation

PPP Services

HA PPP Programmes

- General Outpatient Clinic Public-Private Partnership Programme (GOPC PPP)
- Radiological Investigation Services Collaboration (Radi Collaboration)
- Cataract Surgeries Programme (CSP)
- Haemodialysis Public-Private Partnership Programme (HD PPP)
- Colon Assessment Public-Private Partnership Programme (Colon PPP)
- Glaucoma Public-Private Partnership Programme (Glaucoma PPP)
- Radiotherapy Services Collaboration Programme
- Cesarean Section Services Collaboration Programme

HHB Programmes

- District Health Centres related programmes

HA Service Collaboration Programmes

- Breast Cancer Surgery Collaboration (CA Breast PPP)
- Trauma Operative Service Collaboration Programme (Trauma PPP)
- CUHK Collaboration Programme
- HA referral to private hospital low-charge bed
- Investigation Service Public-Private Partnership Programme (Coming soon)

DH Collaboration Programmes

- Colorectal Cancer Screening Programme

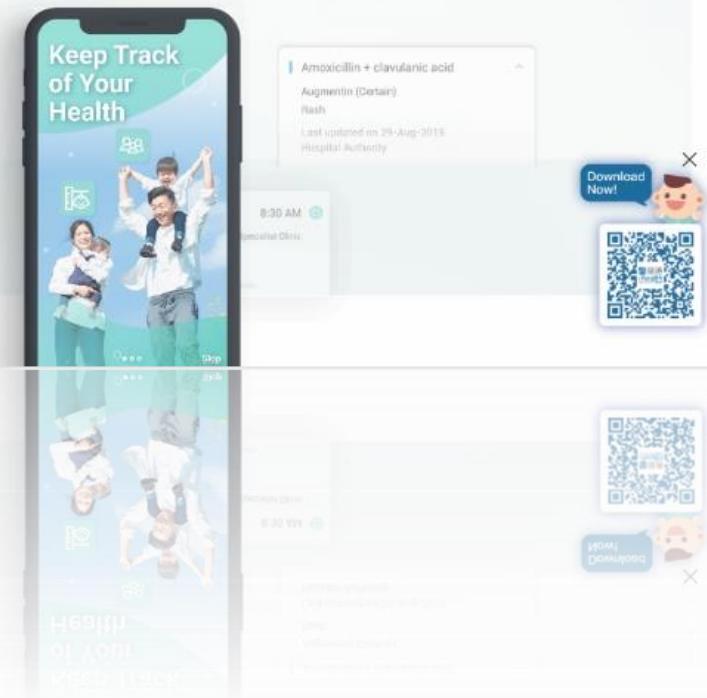
Total 15 services





Managing Your Health
anytime, anywhere.

醫健通 eHealth, a one-stop access of useful health information and your health records. Leading you to better health within one click.



Thank You!

Dataset briefing for Allergy / ADR & Immunisation

By Ms Cally Chau (Health Informatics Analyst I, Hospital Authority)
& Ms Mavis Pow (Health Informatics Analyst I, Hospital Authority)

ALLERGY & ADVERSE DRUG REACTION (ADR) INFORMATION STANDARDS

**HL7 Hong Kong FHIR® Connectathon
2024.02.19**



Aim

- To introduce the information standards of eHRSS domains:
 - Allergy
 - Adverse Drug Reaction (ADR)

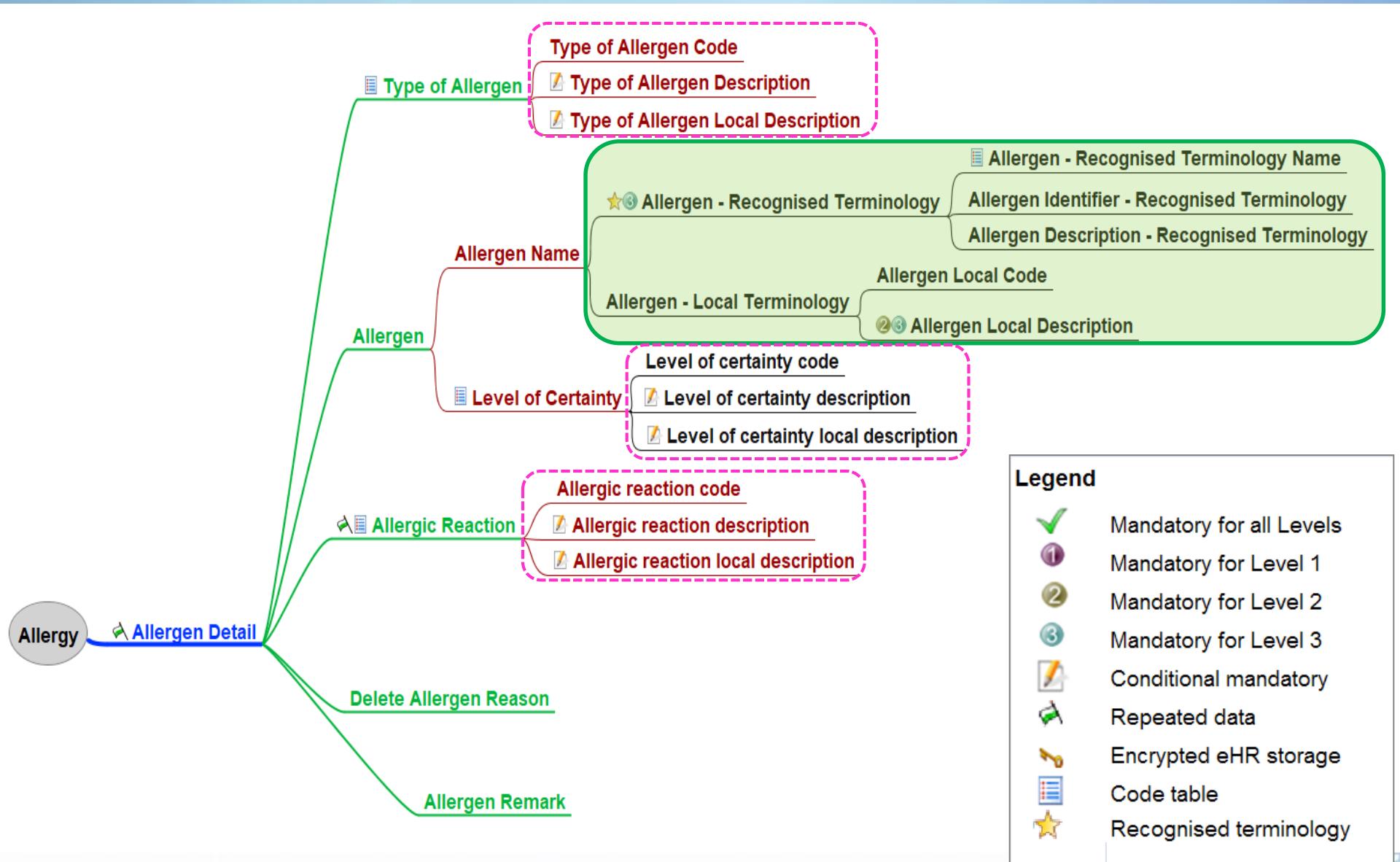


Allergy & ADR

- Include information on type of biological, physical or chemical agents that would result in / is proven to give rise to adverse health effects
- Details of the adverse reactions, if occurred, should also be included
- Absence of the information does not imply the absence of the condition
- Not display “No known drug allergy” (NKDA) information
- **Level 2 & 3 data, No Level 1 data**



Mind map: Allergy



Example – Level 2 (Allergy)

Entity Name	Data requirement (Certified Level 2)	Example (Certified Level 2)
Type of allergen local description	O	Unknown
Allergen local code	O	abc
Allergen local description	M	Fish
Level of certainty local description	O	Not sure
Allergic reaction local description	O	Rash
Delete allergen reason	O	abc
Allergen remark	O	abc

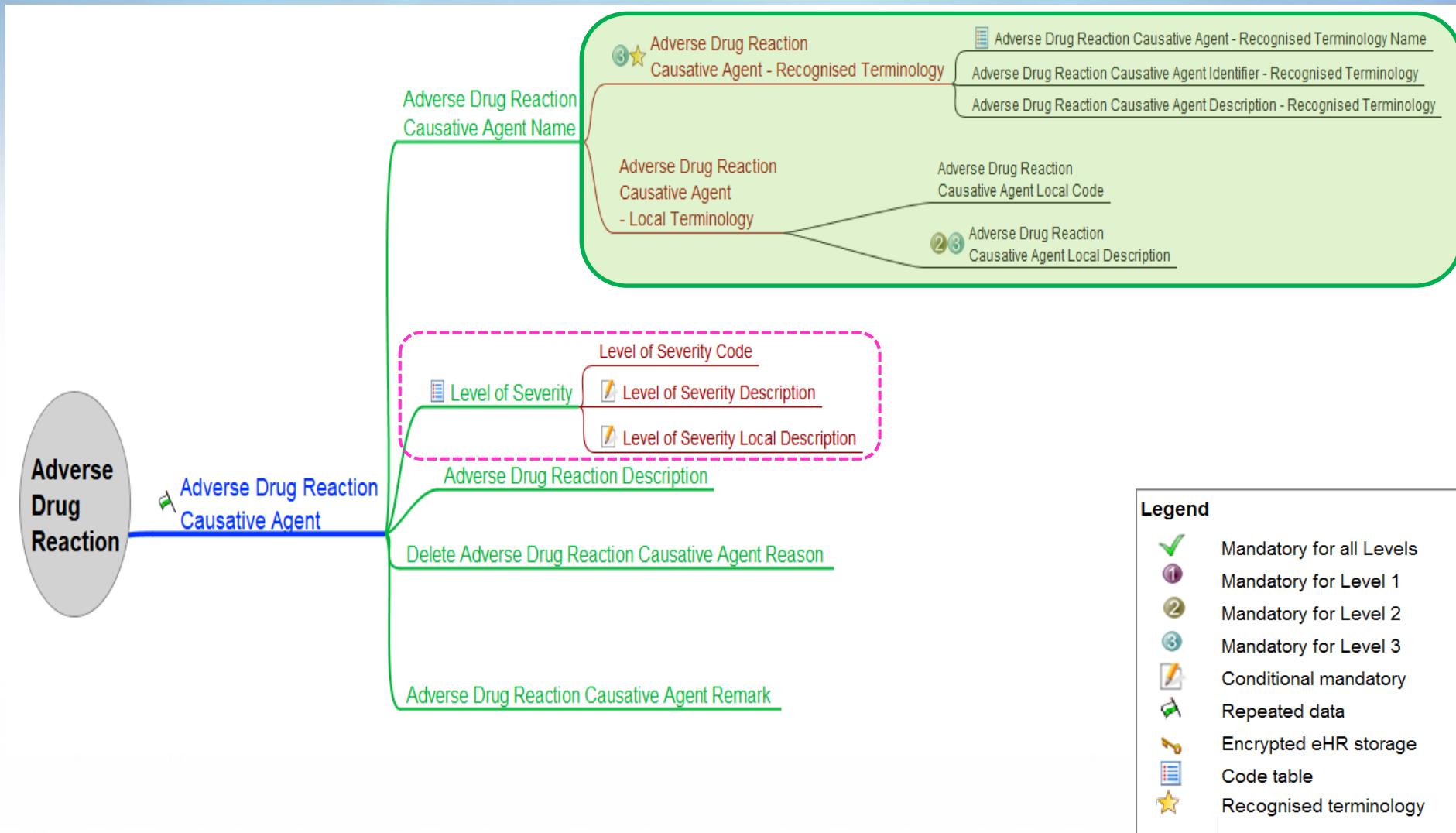


Example – Level 3 (Allergy)

Entity Name	Code Table	Data requirement (Certified Level 3)	Example (Certified Level 3)
Type of allergen code	Type of allergen	O	Drug
Type of allergen description	Type of allergen	M if [Type of allergen code] is given NA if [Type of allergen code] is blank	Allergen
Type of allergen local description		O / M if [Type of allergen code] is given	
Allergen - recognised terminology name	Recognised terminology name - pharmaceutical product or substance	M	
Allergen identifier - recognised terminology		M	234556
Allergen description - recognised terminology		M	Panadol (paracetamol) oral tablet 500 mg
Allergen local code		O	a1234
Allergen local description		M	Peni G
Level of certainty code	Allergy level of certainty	O	S
Level of certainty description	Allergy level of certainty	M if [Level of certainty code] is given NA if [Level of certainty code] is blank	Suspected
Level of certainty local description		M if [Level of certainty code] is given O if [Level of certainty code] is blank	Suspected
Allergic reaction code	Allergic reaction	O	2
Allergic reaction description	Allergic reaction	M if [Allergic reaction code] is given NA if [Allergic reaction code] is blank	Allergic rhinitis
Allergic reaction local description		M if [Allergic reaction code] is given O if [Allergic reaction code] is blank	Allergic rhinitis
Delete allergen reason		O	abc
Allergen remark		O	abc

Level 3:
Only accept [Type
of allergen] =
“Drug”

Mind map: ADR (2)



Example – Level 2 (ADR)

Entity Name	Data requirement (Certified Level 2)	Example (Certified Level 2)
Adverse drug reaction causative agent local code	O	258
Adverse drug reaction causative agent local description	M	Peni
Level of severity local description	O	mod
Adverse drug reaction description	O	Skin rash
Delete adverse drug reaction causative agent reason	O	error due to wrong patient
Adverse drug reaction causative agent remark	O	abc

Example – Level 3 (ADR)

Entity Name	Code Table	Data requirement (Certified Level 3)	Example (Certified Level 3)
Adverse drug reaction causative agent - recognised terminology name	Recognised terminology name - pharmaceutical	M	HKCTT
Adverse drug reaction causative agent identifier - recognised terminology		M	12345
Adverse drug reaction causative agent description - recognised terminology		M	Penicillin
Adverse drug reaction causative agent local code		O	258
Adverse drug reaction causative agent local description		M	Pen
Level of severity code	Adverse drug reaction severity level	O	M
Level of severity description	Adverse drug reaction severity level	M if [Level of severity code] is given NA if [Level of severity code] is blank	Mild
Level of severity local description		M if [Level of severity code] is given O if [Level of severity code] is blank	Moderate
Adverse drug reaction description		O	Angioedema
Delete adverse drug reaction causative agent reason		O	mixing patient entry
Adverse drug reaction causative agent remark		O	abc



eHR viewer: Allergy & ADR

Clinical Administration Information

王黑毒 WONG, BLACKBERRIES
HKIC : UH977321(6) DOB : 29-Feb-1912 Age : 101 years Sex : M Details ►

Allergy & ADR Close Record Select Patient

Allergy & Adverse Drug Reaction Details

Participant's all Allergy and ADR information is displayed.

View: Active ▾

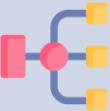
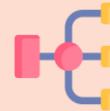
Allergen	Allergy Information	Date	Institution
▼ DOXYCYCLINE			
VIBRAMYCIN	Certain,Esophagitis	12-Feb-2012	VUC4_A
DOXY-100	Certain Esophagitis	14-Feb-2012	VUC4_A
DOXYCYCLINE HYCLATE		2-Dec-2011	VUC4_A
AUGMENTIN	Certain, local	28-Dec-2011	VHA
PENICILLIN	Suspected,Manifestation uncertain, neck stiffness with penicillin	22-Dec-2011	VUC4_B
Allergen Type: Drug Allergen			
Allergen Remark: Hotness of body, Facial swelling			
ADR Causative Agent	ADR Information	Date	Institution
▼ DICLOFENAC			
DICLOFENAC SODIUM	Severe,Urticaria	05-May-2012	VUC4_A
VOLTAREN	Mild,Skin Rash	04-Mar-2012	VUC4_B
▼ METHYLDOPA			
ALDOMET [METHYLDOPA]	Mild,Drowsiness	03-Jan-2012	VUC4_B
ALDOMET [METHYLDOPA]	Mild,Drowsiness	03-Jan-2012	VHA
NATRILIX [INDAPAMIDE]	Mild,Hypokalemia,Hyponatremia	23-Dec-2011	VUC4_A
RAMIPRIL	Mild,Acute Renal Disease, facial rash with itchiness without swelling reported	22-Dec-2011	VHA

醫健通 eHealth 醫健通 eHealth

Clinical Note & Summary Referral Birth Record Encounter Problem / Diagnosis Procedure Investigation Report Prescribing History Dispensing History Chemical Pathology Haematology Immunology Microbiology & Virology Anatomical Pathology Toxicology Transplantation & Immunogenetics Molecular Pathology General & Other General Radiology Computed Tomography Angiographic / Vascular IR Non-vascular IR Magnetic Resonance Imaging

健通 health

Related files: Allergy / ADR

	Allergy	ADR
Data schema		
Codex 	Type of allergen	
	Recognised terminology name – pharmaceutical product	Recognised terminology name – pharmaceutical product
	Allergy level of certainty	ADR severity level
	Allergic reaction	

THANK YOU





Codex: Type of allergen

Type of allergen

Purpose: to define the type of allergen

Reference: Hospital Authority

Term ID	eHR Value	eHR Description
9050114	Drug	Drug allergen
9050299	Non-drug	Non-drug allergen
9050461	Unclassify	Unclassify type of allergen



Codex: RT name – pharmaceutical product

Recognised terminology name - pharmaceutical product or substance

Purpose: to define the names of the recognised terminology for pharmaceutical product or substance

Term ID	eHR Value	eHR Description	Allowable Values
9050183	HKCTT	Hong Kong Clinical Terminology Table	Nature = Pharmaceutical product or Substance
9050372	RPP	Registered Pharmaceutical Products	All values



Codex: Allergy level of certainty

Allergy level of certainty

Purpose: to define the certainty of the allergy

Source: e-HR

Term ID	eHR Value	eHR Description
9050490	S	Suspected
9050065	C	Certain



Codex: Allergic reaction

Allergic reaction

Purpose: to define the allergic reaction

Source: Hospital Authority

Term ID	eHR Value	eHR Description
33388	1	Allergic contact dermatitis
8394	2	Allergic rhinitis
19449	3	Anaphylaxis
30561	4	Angioedema
4545	5	Aplastic anaemia
8502	6	Asthma
41769	7	Atopic dermatitis
38271	8	Cholestasis
38270	9	Eczema
12832	10	Erythema multiforme
12840	11	Erythema nodosum
33389	12	Erythroderma
33390	13	Exfoliative dermatitis
30953	14	Fever
38272	15	Fibrosing alveolitis
41786	16	Fixed drug eruptions
33391	17	Generalised liver damage
4525	18	Haemolytic anaemia
41770	19	Photosensitivity
12872	20	Pruritus
15773	21	Rash
33392	22	Serum sickness
12837	23	Stevens-Johnson syndrome
12830	24	Toxic erythema
12988	25	Urticaria
41789	26	Other allergic reaction
41771	27	Manifestation uncertain
30957	28	Dyspnoea
46885	29	Eyelid swelling
46886	30	Facial swelling
46887	31	Lip swelling
46898	32	Other swelling
47994	33	Stevens-Johnson syndrome, toxic epidermal necrolysis spectrum
44776	34	Acute generalised exanthematous pustulosis
18360	35	Blister
43731	36	Cytopenia
47995	37	Drug reaction with eosinophilia and systemic symptoms
8296	38	Hypotension
8190	39	Vasculitis



Codex: RT name – pharmaceutical product

Recognised terminology name - pharmaceutical product or substance

Purpose: to define the names of the recognised terminology for pharmaceutical product or substance

Term ID	eHR Value	eHR Description	Allowable Values
9050183	HKCTT	Hong Kong Clinical Terminology Table	Nature = Pharmaceutical product or Substance
9050372	RPP	Registered Pharmaceutical Products	All values



Codex: ADR severity level

Adverse drug reaction severity level

Purpose: to define the severity level of the adverse drug reaction

Reference: Hospital Authority

Term ID	eHR Value	eHR Description
9050268	M	Mild
9050404	S	Severe

Information model: Immunisation record

Data compliance walkthrough – HI(S&P)5

2023.02.19

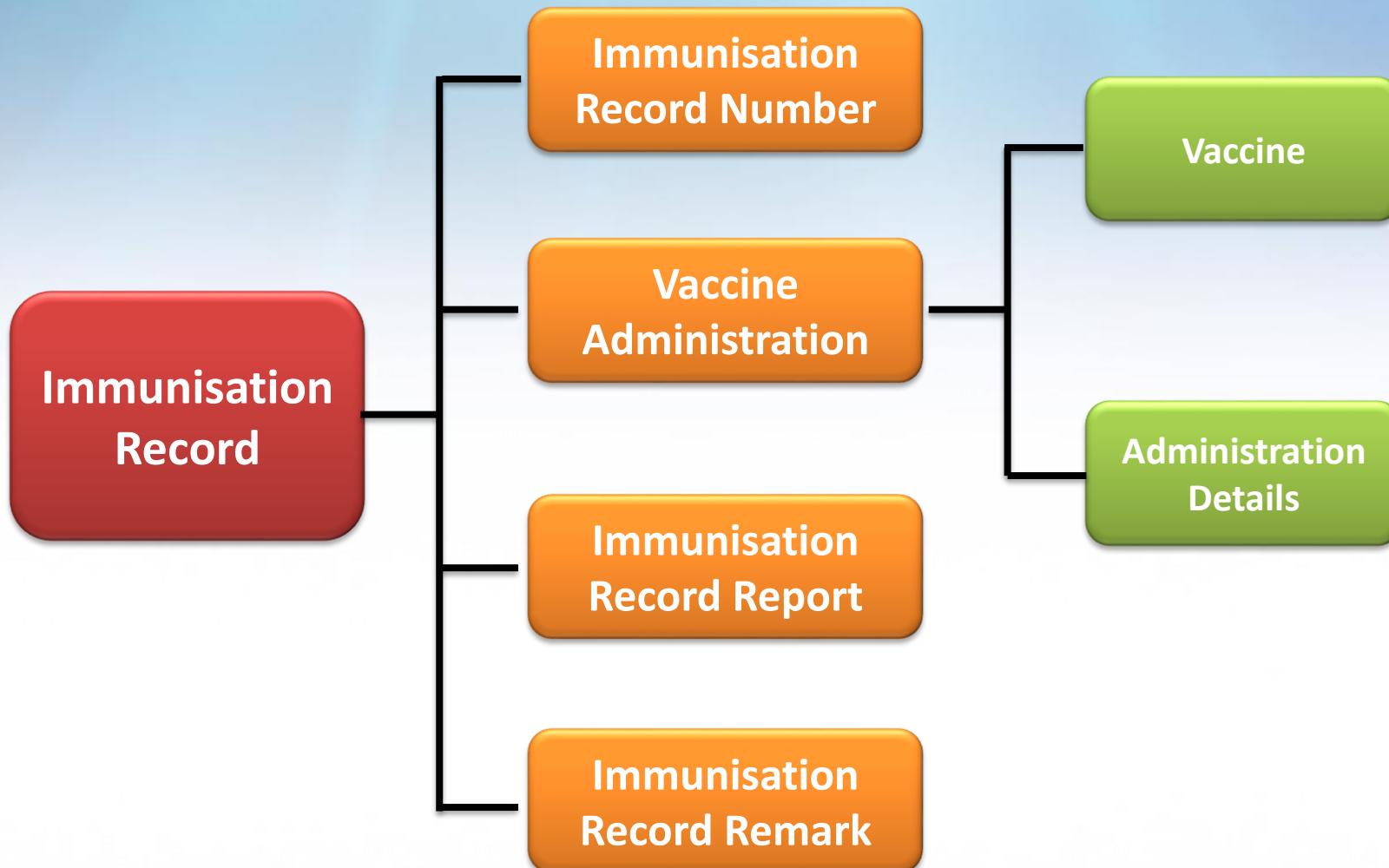


Objective

- To introduce the eHR domain dataset standard to members:
 - Immunisation record



Immunisation Record



Immunisation Record Number

Immunisation
Record Number

Vaccine
Administration

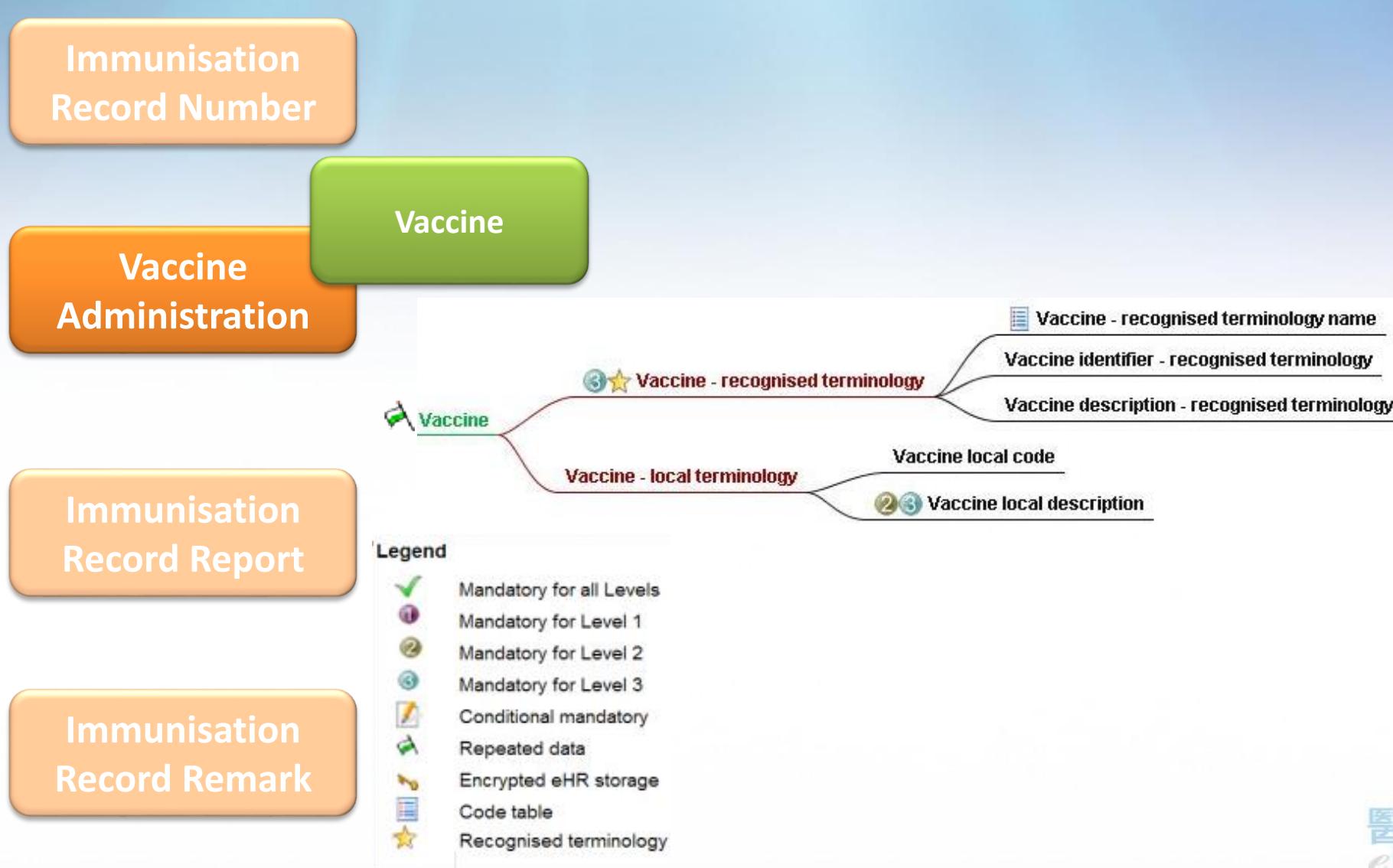
Immunisation
Record Remark

Immunisation
Record Report

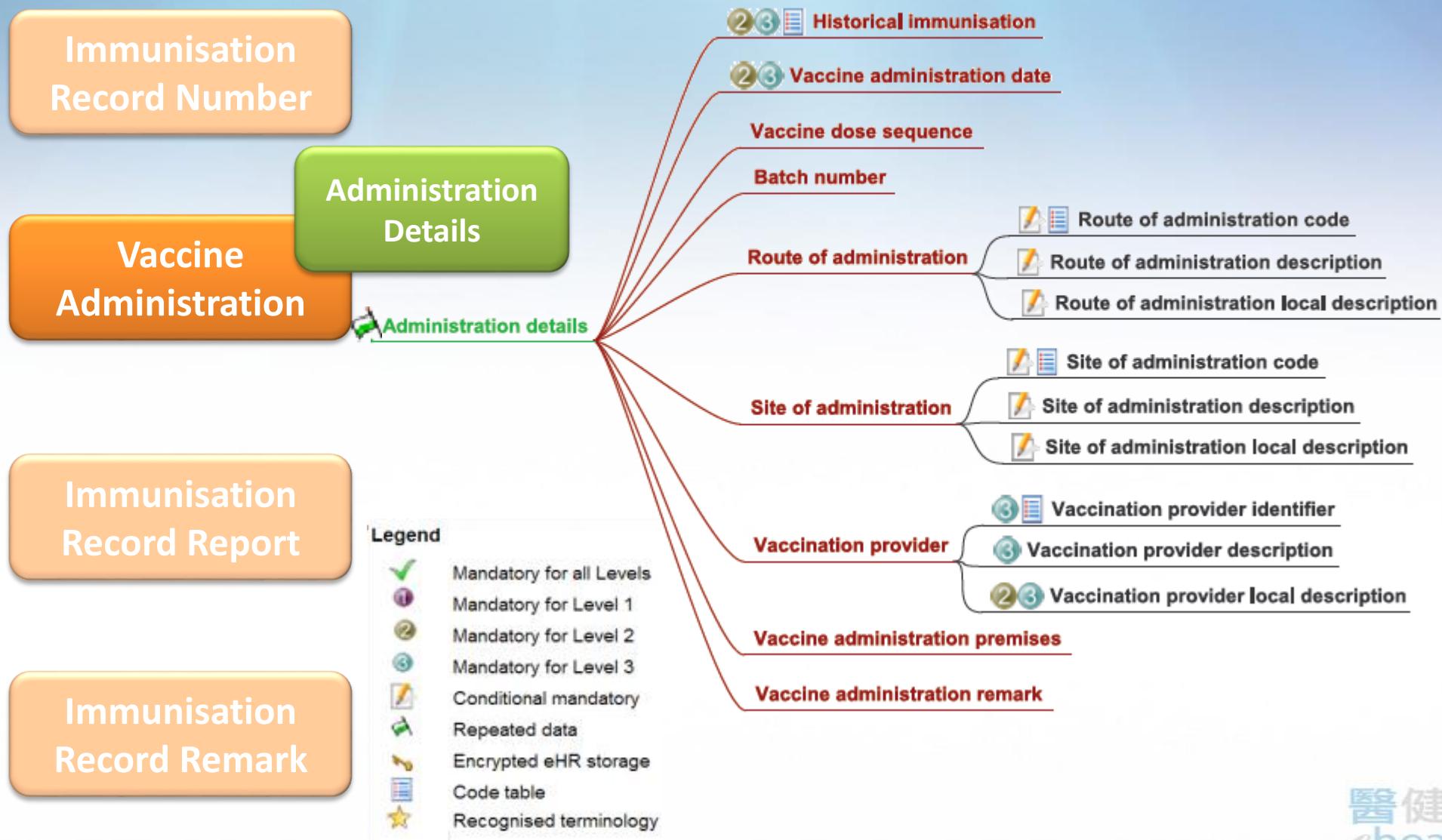
Immunisation record number



Vaccine Administration



Vaccine Administration



Immunisation Record Report

Immunisation
Record Number

Vaccine
Administration

Immunisation
Record Report

Immunisation
Record Remark

Immunisation record report

Legend

- Mandatory for all Levels
- Mandatory for Level 1
- Mandatory for Level 2
- Mandatory for Level 3
- Conditional mandatory
- Repeated data
- Encrypted eHR storage
- Code table
- Recognised terminology

Immunisation record report title

Immunisation record report (text)

Immunisation record report (PDF)

① Immunisation record report date

Immunisation Record Remark

Immunisation
Record Number

Vaccine
Administration

Immunisation
Record Report

Immunisation
Record Remark

Immunisation record remark



Immunisation : Example Level 1

Entity Name	Data requirement (Certified Level 1)	Example (Certified Level 1)
Immunisation record number	O	5805 0000 XXXX
Immunisation record report title	O	Immunisation record
Immunisation record report (text)	O or M if [Immunisation record report (PDF)] is blank	immunisation vaccine given on dd/mm/yyyy
Immunisation record report (PDF)	O or M if [Immunisation record report (text)] is blank	
Immunisation record report date	M	dd/mm/yyyy
Immunisation record remark	O	next injection date is dd/mm/yyyy

Immunisation :

Example Level 2 (1/2)

Entity Name	Data requirement (Certified Level 2)	Example (Certified Level 2)
Immunisation record number	O	5805 0000 XXXX
Vaccine local code	O	MMR
Vaccine local description	M	MMR
Historical immunisation	M	No
Vaccine administration date	M	1/11/2009
Vaccine dose sequence	O	1st dose
Batch number	O	09-33344-XX098
Route of administration local description	O	IM
Site of administration local description	O	L Thigh
Vaccination provider local description	M	Orange Healthcare
Vaccine administration premises	O	Nil
Vaccine administration remark	O	Nil



Immunisation :

Example Level 2 (2/2)

Entity Name	Data requirement (Certified Level 2)	Example (Certified Level 2)
Immunisation record report title	0	Immunisation record
Immunisation record report (text)	0	immunisation vaccine given on dd/mm/yyyy
Immunisation record report (PDF)	0	
Immunisation record remark	0	next injection date is dd/mm/yyyy

Immunisation :

Example Level 3 (1/2)

Entity Name	Data requirement (Certified Level 3)	Example (Certified Level 3)
Immunisation record number	O	5805 0000 XXXX
Vaccine - recognised terminology name	M	CPP
Vaccine identifier - recognised terminology	M	01891
Vaccine description - recognised terminology	M	MMR II
Vaccine local code	O	MMR II
Vaccine local description	M	MMR II
Historical immunisation	M	Unspecified
Vaccine administration date	M	1/11/2009
Vaccine dose sequence	O	2nd dose



Immunisation :

Example Level 3 (2/3)

Entity Name	Data requirement (Certified Level 3)	Example (Certified Level 3)
Batch number	O	09-33355-XX099
Route of administration code	N/A or M if [Route of administration description] is given	IM
Route of administration description	N/A or M if [Route of administration code] is given	Intramuscular
Route of administration local description	O or M if [Route of administration code] is given	Intramuscular

Immunisation :

Example Level 3 (3/3)

Entity Name	Data requirement (Certified Level 3)	Example (Certified Level 3)
Site of administration code	N/A or M if [Site of administration description] is given	LT
Site of administration description	N/A or M if [Site of administration code] is given	Left Thigh
Site of administration local description	O or M if [Site of administration code] is given	Lt Thigh
Vaccination provider identifier	M	DH
Vaccination provider description	M	Department of Health
Vaccination provider local description	M	Dept of Health
Vaccine administration premises	O	Nil
Vaccine administration remark	O	Nil
Immunisation record report title	O	Immunisation record
Immunisation record report (text)	O	immunisation vaccine given on dd/mm/yyyy
Immunisation record report (PDF)	O	
Immunisation record remark	O	next injection date is dd/mm/yyyy

Exceptional report – ‘Re-grade’ report

- Not meet data compliance level
 - Codex
 - Uploaded ‘eHR value’ not found in codex
 - E.g. ‘A’ in ‘Route of administration’

eHR Value	eHR Description
ID	Intradermal
IM	Intramuscular
IN	Intranasal
IV	Intravenous
PO	Oral
OTH	Other/Miscellaneous
SCH	Subcutaneous
TD	Transdermal

- Via inbox

Data schema (1/3)

eHR Sharable Data - Immunisation Record

Form	Entity Name	Entity ID	Definition	Data Type (code)	Data Type (description)	Validation Rule	Repeated Data	Code Table	Remark	Data Type in IAMS	Data requirement (Certified Level 1)	Data requirement (Certified Level 2)	Data requirement (Certified Level 3)	Example (Certified Level 1)	Example (Certified Level 2)	Example (Certified Level 3)
Immunisation	Immunisation record number	1001804	A unique identifier for each vaccine administration record defined by individual healthcare institution	ST	String					ST	O	O	O	5805 0000 XXXX	5805 0000 XXXX	5805 0000 XXXX
Immunisation	Vaccine - recognised terminology name	1004035	Name of the recognised terminology / classification set for pharmaceutical product (vaccine)	CE	Coded Element	If eHR value = 1)HKCTT, nature must be Pharmaceutical Products with Vaccine flag = yes; 2)RPP, values will be checked against with the HKCTT with nature must be Pharmaceutical Product with Vaccine flag = yes.	y	Recognised terminology name - pharmaceutical product (vaccine)		S	N/A	N/A	M	N/A	N/A	RPP
Immunisation	Vaccine identifier - recognised terminology	1001809	Unique identifier of individual vaccine in the recognised terminology for pharmaceutical product (vaccine)	CE	Coded Element	[Vaccine identifier - recognised terminology] should be included in the selected terminology of the 'Vaccine - recognised terminology name' code table	y			DE	N/A	N/A	M	N/A	N/A	01891
Immunisation	Vaccine description - recognised terminology	1001810	Description of individual vaccine in the recognised terminology for pharmaceutical product (vaccine). It should be the corresponding description of the selected [Vaccine identifier - recognised terminology].	CE	Coded Element	It should be matched with the corresponding description of the selected [Vaccine identifier - recognised terminology]; If [Vaccine - recognised terminology name] = HKCTT, [Vaccine description - recognised terminology] should be provided	y			DE	N/A	N/A	M	N/A	N/A	MMR II
Immunisation	Vaccine local code	1001806	Local code issued to the vaccine as defined by individual healthcare institution	ST	String		y			ST	N/A	O	O	N/A	MMR	MMR II
Immunisation	Vaccine local description	1001807	Local description of the vaccine defined by individual healthcare institution	ST	String					ST	N/A	M	M	N/A	MMR	MMR II
Immunisation	Historical immunisation	1004028	Indicator on whether the immunisation data is a historical information. All historical immunisation data should be based on the immunisation record documented by previous healthcare providers who gave the vaccine to the patient.	CE	Coded Element		y	Yes No Unspecified		S	N/A	M	M	N/A	No	Unspecified
Immunisation	Vaccine administration date	1001805	The date on which the vaccine was given	TS	Time Stamp		y			TS	N/A	M	M	N/A	11/01/09	11/01/09
Immunisation	Vaccine dose sequence	1001812	Immunisation dose in series, booster	ST	String		y			ST	N/A	O	O	N/A	1st dose	2nd dose

Level 3 – vaccine

Level 2 – vaccine

Data schema (2/3)

eHR Sharable Data - Immunisation Record																
Form	Entity Name	Entity ID	Definition	Data Type (code)	Data Type (description)	Validation Rule	Repeated Data	Code Table	Remark	Data Type in IAMS	Data requirement (Certified Level 1)	Data requirement (Certified Level 2)	Data requirement (Certified Level 3)	Example (Certified Level 1)	Example (Certified Level 2)	Example (Certified Level 3)
Immunisation	Batch number	1001811	Batch number for drug product as assigned by the drug manufacturer	ST	String		y			ST	N/A	O	O	N/A	09-33344-XX098	09-33355-XX099
Immunisation	Route of administration code	1004029	(eHR value) of the "Route of drug administration" code table which is used to identify the path by which a drug / substance was taken into the body.	CE	Coded Element		y	Route of drug administration		S	N/A	N/A	N/A or M if [Route of administration description] is given	N/A	N/A	IM
Immunisation	Route of administration description	1003422	(eHR description) of the "Route of drug administration" code table which is used to identify the path by which a drug / substance was taken into the body. [Route of administration description] should be the corresponding description of the selected [Route of administration code]	ST	String		y			ST	N/A	N/A	N/A or M if [Route of administration code] is given	N/A	N/A	Intramuscular
Immunisation	Route of administration local description	1003423	Description of the path by which a drug / substance was taken into the body, defined by individual healthcare institution	ST	String		y			ST	N/A	O	O or M if [Route of administration code] is given	N/A	IM	Intramuscular
Immunisation	Site of administration code	1004030	(eHR value) of "Site of Drug Administration" code table which is used to identify the body site where the drug / substance was given.	CE	Coded Element		y	Site of drug administration		S	N/A	N/A	N/A or M if [Site of administration description] is given	N/A	N/A	LT
Immunisation	Site of administration description	1003424	(eHR description) of "Site of Administration" code table which is used to identify the body site where the drug / substance was given. The [Site of administration description] should be the corresponding description of the selected [Site of administration code].	ST	String		y			ST	N/A	O	N/A or M if [Site of administration code] is given	N/A	N/A	Left Thigh
Immunisation	Site of administration local description	1003425	Local description of the body site where the drug / substance was given, defined by individual healthcare institution	ST	String		y			ST	N/A	O	O or M if [Site of administration code] is given	N/A	L Thigh	L Thigh
Immunisation	Vaccination provider code	1003875	(eHR value) of the "Vaccination Provider" code table which is used to identify the healthcare provider who administered the vaccine.	CE	Coded Element		y	Vaccination provider	Display rule: if ([Historical immunisation] = no, eHR will display the Attending HCP available from system interface)	S	N/A	N/A	M	N/A	N/A	DH
Immunisation	Vaccination provider description	1003426	(eHR description) of the "Vaccination Provider" code table which is used to identify the healthcare provider who administered the vaccine. The [Vaccination provider description] should be the corresponding description of the selected [Vaccination provider code]	ST	String		y		Display rule: if ([Historical immunisation] = no, eHR will display the Attending HCP available from system interface)	ST	N/A	N/A	M	N/A	N/A	Department of Health

Level 3 – route of administration

Level 2 – route of administration

Level 3 – site of administration

Level 2 – site of administration

Level 3 – vaccine provider



Data schema (3/3)

eHR Sharable Data - Immunisation Record																
Form	Entity Name	Entity ID	Definition	Data Type (code)	Data Type (description)	Validation Rule	Repeated Data	Code Table	Remark	Data Type in IAMS	Data requirement (Certified Level 1)	Data requirement (Certified Level 2)	Data requirement (Certified Level 3)	Example (Certified Level 1)	Example (Certified Level 2)	Example (Certified Level 3)
Immunisation	Vaccination provider local description	1003427	Local description of the healthcare provider who administered the vaccine, defined by individual healthcare institution	ST	String	y			Display rule: If [Historical immunisation] is true, then display the Attending HCP available from custom interface.	ST	N/A	M	M	N/A	Orange Healthcare	Dept of Health
Immunisation	Vaccine administration premises	1001815	Name of the premises where the vaccine was administered	ST	String		y			ST	N/A	O	O	N/A	Nil	Nil
Immunisation	Vaccine administration remark	1003428	The additional information about the vaccine administration	TX	Text		y			TX	N/A	O	O	N/A	Nil	Nil
Immunisation	Immunisation record report title	1003429	The title of immunisation report	ST	String					ST	O	O	O	Immunisation record	Immunisation record	Immunisation record
Immunisation	Immunisation record report (text)	1003430	Report of the immunisation record in text format	TX	Text					TX	O or M if [Immunisation record report (PDF)] is blank	O	O	immunisation vaccine given on dd/mm/yyyy	immunisation vaccine given on dd/mm/yyyy	immunisation vaccine given on dd/mm/yyyy
Immunisation	Immunisation record report (PDF)	1001818	Report of the immunisation record in Portable Document Format (PDF)	ED	Encapsulated data					ED	O or M if [Immunisation record report (text)] is blank	O	O			
Immunisation	Immunisation record report date	1003431	The date when the immunisation record is documented, which is also considered as the date when the vaccine was given	TS	Time Stamp				Display rule: Certified Level 1: display [Immunisation record report date] Certified Level 2 / 3: display [Vaccine administration]	TS	M	N/A	N/A	dd/mm/yyyy	dd/mm/yyyy	dd/mm/yyyy
Immunisation	Immunisation record remark	1003432	The additional information about the immunisation record	TX	Text					TX	O	O	O	next injection date is dd/mm/yyyy	next injection date is dd/mm/yyyy	next injection date is dd/mm/yyyy

Level 2 – vaccine provider

Level 1 data

Codex

- Route of drug administration
- Site of drug administration
- Vaccine provider
- Recognised terminology name – pharmaceutical product
- Yes No Unspecified



Codex - Route of drug administration

eHR Sharable Data - Codex : Route of drug administration

Route of drug administration

Purpose : To identify the route of drug administration on the patient

Reference : DH document on HL7 code values for route_site of immunisation; HL7 v2.5 Table 162

Term ID	eHR Value	eHR Description
9050205	ID	Intradermal
9050206	IM	Intramuscular
9050207	IN	Intranasal
9050208	IV	Intravenous
9050314	PO	Oral
9050325	OTH	Other/Miscellaneous
9050425	SCH	Subcutaneous
9050445	TD	Transdermal



Codex – Site of drug administration

eHR Sharable Data - Codex : Site of drug administration

Site of drug administration

Purpose : To identify the site of drug administration on the patient

Reference: DH document on HL7 code values for route_site of immunisation; HL7 v2.5 Table 163

Term ID	eHR Value	eHR Description
9050235	LT	Left thigh
9050231	LA	Left arm
9050232	LD	Left deltoid
9050233	LG	Left gluteus medius
9050236	LVL	Left vastus lateralis
9050234	LLFA	Left lower forearm
9050382	RA	Right arm
9050386	RT	Right thigh
9050387	RVL	Right vastus lateralis
9050384	RG	Right gluteus medius
9050383	RD	Right deltoid
9050385	RLFA	Right lower forearm





Codex – Vaccination provider

eHR Sharable Data - Codex : Vaccination provider

Vaccination provider

Purpose : To identify the healthcare provider who administers the vaccine

Reference: HA

Term ID	eHR Value	eHR Description	eHR Description (in Chinese)
9050169	HA	HA hospital / clinic	醫院管理局醫院 / 診所
9050104	DH	DH clinic	衛生署診所
9050358	Private	Private hospital /clinic	私家醫院 / 診所
9050324	Other	Other vaccination provider	其他疫苗接種提供者



Codex – Recognised Terminology Name - Pharmaceutical Product (Vaccine)

eHR Sharable Data - Codex : Recognised Terminology Name - Pharmaceutical Product (Vaccine)

Recognised Terminology Name - Pharmaceutical Product (Vaccine)

Purpose: to define the names of the recognised terminology for pharmaceutical product (vaccine)

Term ID	eHR Value	eHR Description	Allowable Values
9050183	HKCTT	Hong Kong Clinical Terminology Table	Nature = Pharmaceutical Product with Vaccine flag = yes
9050372	List of RPP	List of Registered Pharmaceutical Products	Values will be checked against with the HKCTT with Nature = Pharmaceutical Product and Vaccine flag = yes



Codex - Yes No Unspecified

eHR Sharable Data - Codex : Yes_No_Unspecified

Yes No Unspecified

Reference : HL7

Term ID	eHR Value	eHR Description
9050298	N	No
9050485	Y	Yes
9050469	U	Unspecified



THANK YOU



PMI matching rule for eHR

By Ms Erica Lau (Health Informatics Analyst I, Hospital Authority)



PMI Matching Rule for eHR

HL7 Hong Kong

FHIR® Connectathon Series 2023-2024

Second Connectathon

19 February 2024

Prepared by eHR Information Standard Office



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lth



Purposes

- To introduce the content and standards of Healthcare Recipient Index (HCI) that is a list of personal identification and demographic data for all healthcare recipients who join eHealth to support the sharing of the health records of healthcare recipients among Healthcare providers and eHealth



Agenda

1. eHR data standards: Management of Healthcare Recipient Index (HRI)
2. Healthcare Recipient (HCR) identification
3. eHR HRI data
4. Healthcare Provider (HCP) preparations
5. Problem record in Healthcare Provider (HCP)



Management of Healthcare Recipient Index (HRI)





Management of Healthcare Recipient Index

[G55]

Version 1.3

Mar 2016

The Government of the Hong Kong Special Administrative Region

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Access to the Management of Healthcare Recipient Index

<https://www.ehealth.gov.hk/en/healthcare-provider-and-professional/resources/information-standards/index-management.html>

The screenshot shows the eHealth website's "Management of Healthcare Recipient Index" page. At the top, there is a navigation bar with links: "What's eHealth", "You and your family", "Healthcare provider and professional" (which is underlined), "What's new", and "Contact us". There is also a "Text Size" dropdown. Below the navigation bar, there is a banner featuring a smartphone displaying the eHealth app. The main content area has a blue header with tabs: "Overview", "How to register", "Technical requirements", "Resources" (which is highlighted in white), and "Support". The main text discusses the Healthcare Recipient Index (HRI) as a list of personal identification and demographic data for all healthcare recipients who join the Hong Kong territory-wide Electronic Health Record Sharing System (eHealth). It explains that a HRI must be established to allow the sharing of health records. The document introduces the content and standards of HRI for eHealth of the Hong Kong Special Administrative Region (HKSAR). It should be read in conjunction with the eHR Content Standards Guidebook and its Appendix I on "Person" and related codex developed by the eHR Information Standards Office. It provides general principles for maintaining and improving the quality of the eHR HRI. These principles apply to healthcare recipient enrolment procedures and any designated eHR enrolment office where the HRI is updated. To support effective data sharing among healthcare providers (HCPs) and eHealth, HCPs are encouraged to adopt standard practice for local patient registration.

Management of Healthcare Recipient Index

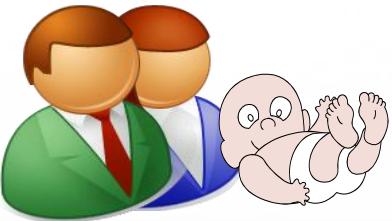
An orange arrow points to the "Management of Healthcare Recipient Index" link at the bottom left of the page.

Healthcare Recipient (HCR) identification



Importance of HCR identification

- For building a womb-to-tomb eHR
- Support authenticating eHRSS data access and sharing
- Link data of HCR accurately and uniquely
- Strengthen public health protection
 - Support disease surveillance & contact tracing



HCR Identification

eHR vs HCP



eHR

Healthcare Recipient Index (HRI)

Persons registered to eHRSS

HCP

Patient Master Index (PMI)



Patients received care in HCP

Permanent listing of (1) Major Keys Identifiers and (2) other demographic data

Major Keys

Keys for eHR-HCP **data sharing**

- Upload health data
- Download health data

Keys for eHR-HCP **communication**

- Sharing consent
- PMI message, e.g. major keys change

(1) HRI - Major Keys Identifiers



Major keys Identifiers

Input according to HCR's identity document

eHR number

HKIC number

For HKIC/ HKBC/ CD holder only

Identity document
Type & number

For non HKIC/ HKBC/ CD holder only

English
Surname

English
Given name

Sex

Date of
Birth

Major keys matched



Exemption Certificate

- Input as far as possible:
 - [HKIC no.]
 - [Doc type] = EC
 - [Doc no.]

Exemption Certification

Serial no.: XXXXXX

Reference: XXXXXXXXX

Date of registration for Hong Kong
Identity Card No. XXXXXX(X): 3 Feb 1992

Consular Corps Identity Card

- Newly added in 2021
- [Doc type]: CD
- [HKIC no.]



Single name

- HCR declares of single name only
 - Enter [Name] accordingly to HCR's indication
 - [Single name indicator] – mark 'Yes'

	Surname	Given Name	
* English Name:	<input type="text"/>	<input type="text" value="Mary"/>	<input checked="" type="checkbox"/> Single Name Ind



Newborn baby

Not yet obtained HK Birth Certificate

- **Identity document type & number**
 - Document type = eHR Document (ED)
 - Document no. = eHR number
- **Name**
 - Baby name format: B/O mother's name

	Surname (English)	Given name (English)	中文姓名
Single	B/O Chan	Sau Mui	陳秀梅之女/子
Twin	B/O Chan	Sau Mui Twn n = 1 or 2	陳秀梅之 X 女/子 X = 大或二
Triplet	B/O Chan	Sau Mui Trn n = 1, 2 or 3	陳秀梅之 X 女/子 X = 大,二或三
Quadruplet	B/O Chan	Sau Mui Qdn n = 1, 2, 3 or 4	陳秀梅之 X 女/子 X = 大,二,三或四
> 4 babies	B/O Chan	Sau Mui Otn n = 1, 2, 3, 4, 5	陳秀梅之 X 女/子 X = 大,二,三,四,五...



(2) HRI - Other demographic data



Patient Identity

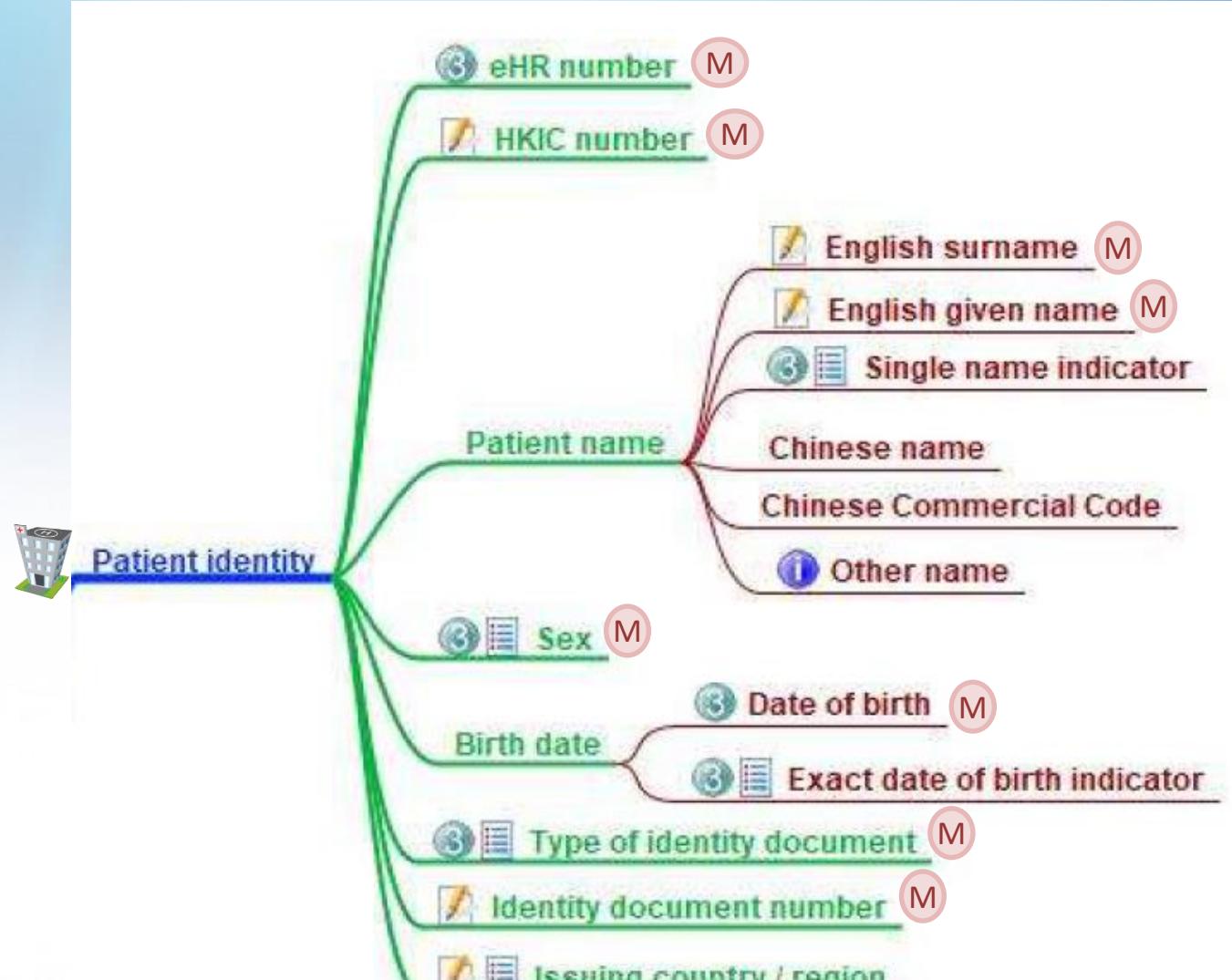
Patient Identity

Patient Contact

eHR registration

Remarks:

Either [HKIC number] or [Identity document number] is mandatory



Contact – Address

Patient Identity

Patient Contact

eHR enrolment



Code Table



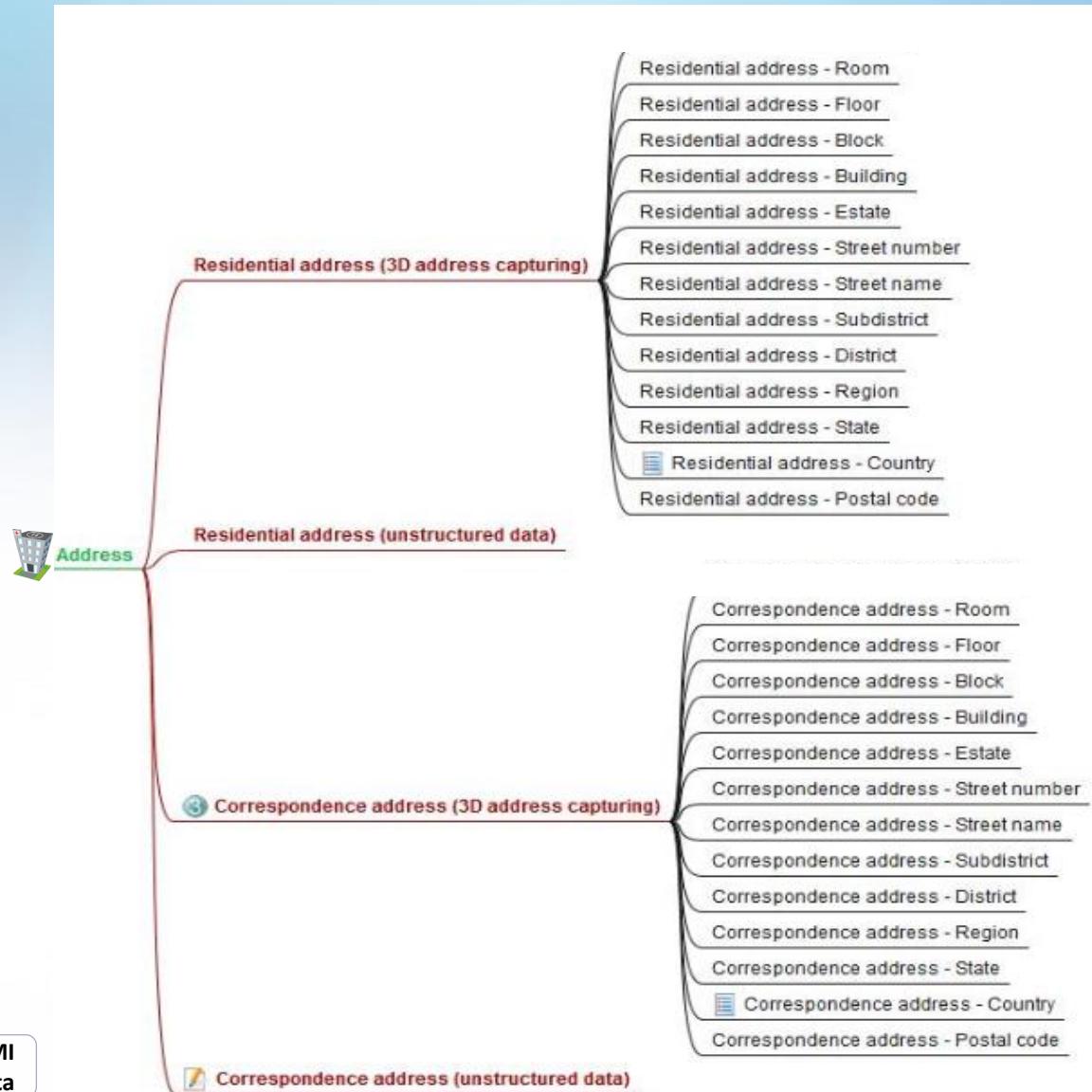
Sharable PMI
data



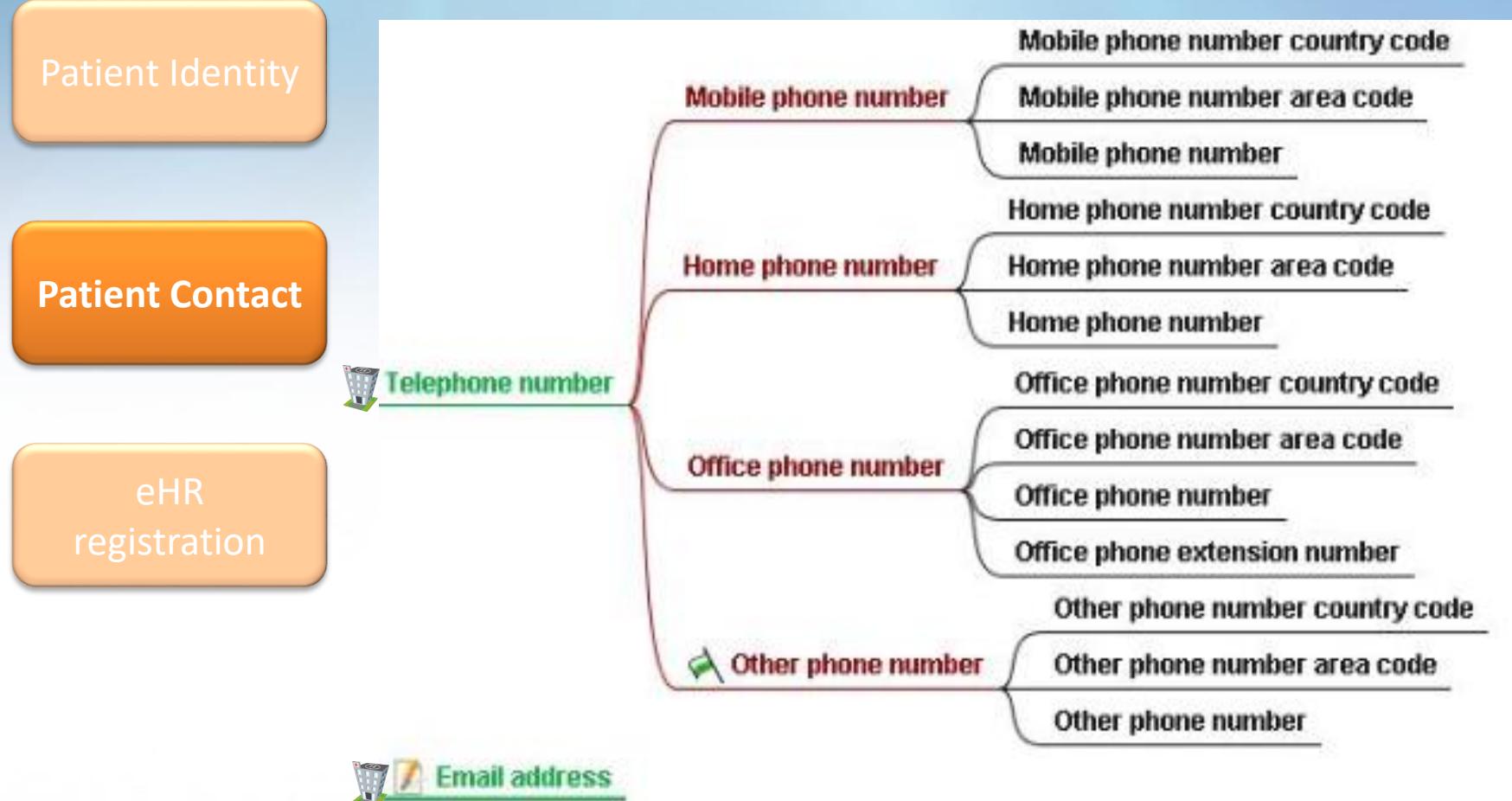
Conditional
mandatory



Mandatory
for Level 3



Contact – Telephone number & Email



Sharable PMI
data



Repeatable



Conditional
mandatory

eHR Registration

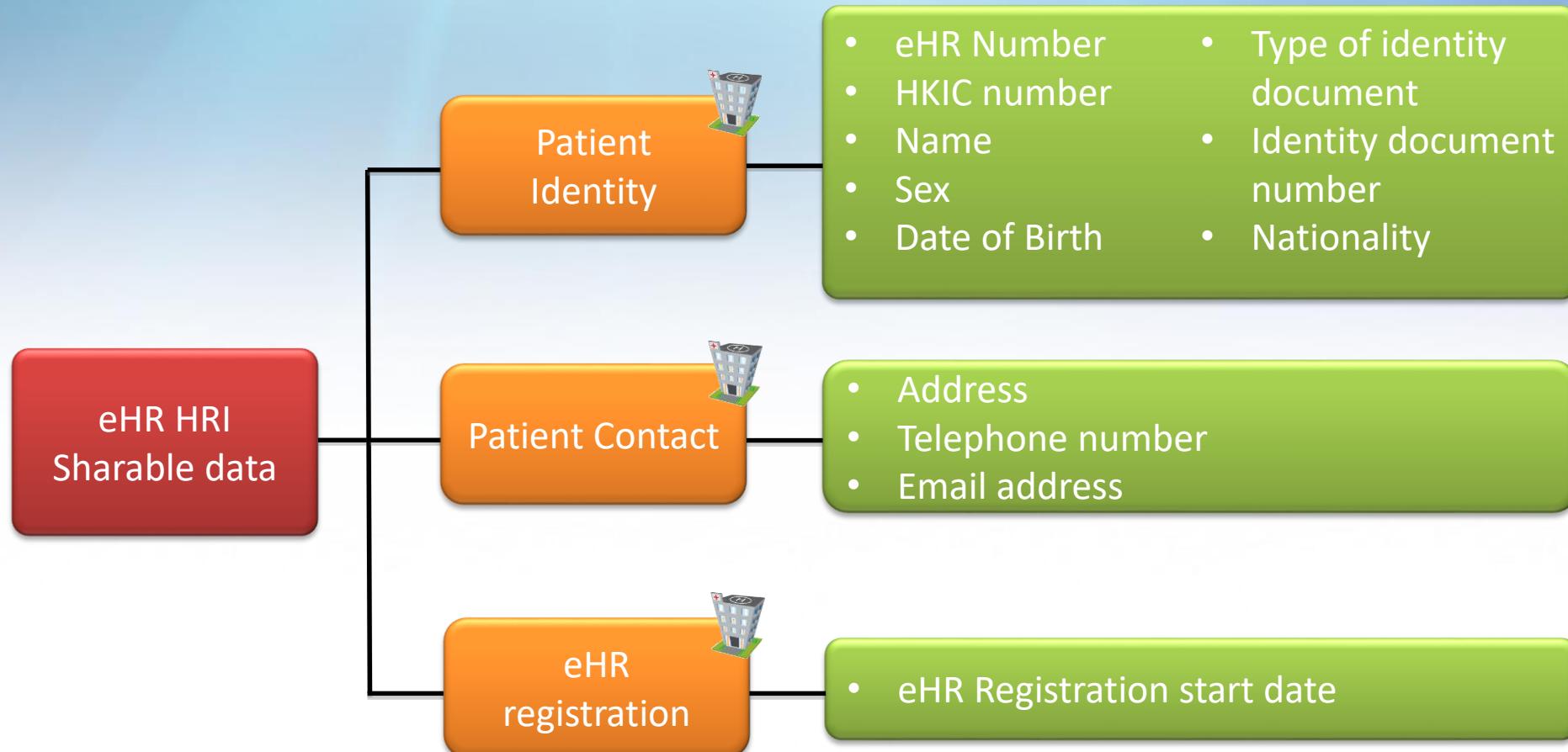
Patient Identity

Patient Contact

eHR
registration



eHR HRI Sharable Data



eHR ‘Sharable data’ on Healthcare Recipient

- A pre-defined set of HRI data that will be subject to sharing in the eHR Sharing System
- Able to be downloaded by Healthcare Provider

eHR Registration Service – Screen layout

eHR Registration System

HCR Management • Record Info Update • Sharing Consent Management • PPI/SCHSA Stage • Reporting • Utilities • Patient Portal (Mobile App) • Attendance Taking for Travel History Enquiry (version 1.5.56 built on 10-Mar-2020)

All in One - Registration / Activation / Sharing Consent

Smart ID

Step 1 Insert HCR's HKID Card
Card Reader Chip facing up

Step 2 Select version
New

Step 3 Select sex and open the Smart ID Card Reader file as instructed
Male 男 Female 女

Manual Input

Fill in the information

Hand typing on a keyboard

ID Doc Type: Q012334 (6)
HKID Card (香港身份證) Document No.

Name: CHAN TAI MAN

Date of Birth: 31-Dec-1980

Gender: Male

Next

醫健通 eHealth
www.ehealth.hk.hk | hksar.govt.hk

eHR Registration Service – Screen layout

The screenshot shows the eHR Registration System interface. At the top, there is a navigation bar with various menu items: HCR Management, Record Info Update, Sharing Consent Management, PPI/SCHSA Stage, Reporting, Utilities, Patient Portal (Mobile App), and Attendance Taking for Travel History Enquiry. The version information (version 1.5.56 built on 10-Mar-2020) is also displayed.

The main area displays a registration form for a healthcare recipient. The form includes fields for personal information (HKIC No., ID Doc Type, Issuing Country/Region, Date of Birth, Sex), contact details (Mobile Phone, Other Phone, Communication Language, Receive Access Notification), and correspondence address (Chinese Address, Room/Flat, Building, Estate/Village, Street No., HK/KLN/NT, Country/Region, Floor, Block, Street/Road, District, State/Province, Subdistrict, Postal Code).

An orange callout box highlights the section containing the recipient's identity data (HKIC No., ID Doc Type, Issuing Country/Region, Date of Birth, Sex, English Name, Chinese Name, Exact DOB, Age, Registration Form Type). The text "Healthcare Recipient's identity data" is written inside this callout box.

At the bottom of the form, there are "Back" and "Next" buttons.

eHR viewer – Screen layout

Medical Record Number: HKIC : Q001000(2)

Date of Birth: 01-May-2012

Age: 13 months

Sex: M

Details ►

Encounter Record

Start Date	End Date	Specialty	Institution	Type	Status
17-Jul-2013		Paediatrics and Adolescent Medicine	UCH	Specialist outpatient consultation	
25-Jun-2013		MRI / Plain MRI Brain, IV contrast enhanced MRI Brain	UCH	Specialist outpatient consultation	
24-Jun-2013		Other / Unclassified	UCH	Specialist outpatient consultation	
27-Mar-2013		Paediatrics and Adolescent Medicine	UCH	Specialist outpatient consultation	Attended
02-Jan-2013		Paediatrics and Adolescent Medicine	UCH	Specialist outpatient consultation	Attended
03-Oct-2012		Paediatrics and Adolescent Medicine	UCH	Specialist outpatient consultation	Attended
08-Aug-2012		Paediatrics and Adolescent Medicine	UCH	Specialist outpatient consultation	Attended
13-Jun-2012		Paediatrics and Adolescent Medicine	UCH	Specialist outpatient consultation	Attended
05-Jun-2012		US / Infant Brain	UCH	Specialist outpatient consultation	Attended
05-Jun-2012		Other / Unclassified	UCH	Specialist outpatient consultation	Attended
16-May-2012		Paediatrics and Adolescent Medicine	UCH	Specialist outpatient consultation	Attended
02-Apr-2012	09-May-2012	Neonatology / Special Care Baby Unit	UCH	Inpatient	Attended

Healthcare Recipient data
(from Healthcare Recipient Index)

HCP preparations



HCP preparations to support data sharing to eHR

1. To comply with eHR HRI standards for eHR-HCP data interoperability
 - adopt major keys principle
 - adopt the format for capturing single name
 - adopt English name format for newborn baby

2. To keep eHR major keys in HCP eMR/ePR for data upload and download



Suggestions to HCP on patient registration

3. Adopting the eHR registration standards for HCP patient registration
 - consistent registration practice
 - according to valid identity document
 - major keys handling
 - newborn registration
 - same standards for data interoperability



Problem record

Error in patient identity at HCP



Problem record

Error in patient identity in HCP



- Problem record
 - PMI of 2 , or more different patients under a HCP are mixed up

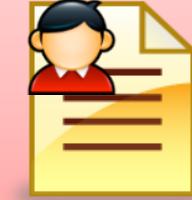
One PMI record contains different patients' data



HCR 1



Episode 1



Episode 2

Problem record

Action by HCP



- **Principle**
 - HCP to verify patient identity & rectify data in local PMI
 - eHR data should be cleaned before further access to eHRSS is allowed
- **Send notification to eHRSS when error in patient identity**
 - is found
 - is settled
- **Rectify HCR's health data**
 - in local eMR / ePR system as appropriate
- **Re-upload the rectified HCR's readily sharable health data to eHRSS** (after eHRSS informed 'data deletion' in eHRSS is completed)



Data Management

Impact to Data Upload and Data access to eHR





eHR data access summary – HCR status

	eHR Scenario	Data viewing	Data upload	Data download ¹
Registration status	eHR registration (for HA / DH only)	Support	Accept	Provide
	HCR account suspension	Not support	Accept	Not provide
	Death of HCR	Not support	Reject	Not provide
	Withdrawal from eHRSS	Not support	Reject	Not provide
	Emergency access	Support	Reject	Not provide
Status of sharing consent	Sharing consent to HCP	Support	Accept	Provide
	Revoke consent to HCP	Not support	Reject	Not provide
	Expiry of sharing consent to HCP	Not support	Reject	Not provide

Remarks:

¹For HCP with push mode: data download is allowed if major keys are matched with eHRSS upon / after the HCP replying eHRSS on HCR giving sharing consent. For HCP with pull mode: data download is allowed if major keys are matched with eHR HRI or eHR HRI history upon HCP's every single request of data download from eHRSS.



eHR data access summary – eHR workflow scenarios

	eHR Scenario	Data viewing	Data upload	Data download
Major keys change	 eHR major key change & un-match with HCP	Support (pop-up message in eHR viewer)	Accept	Provide
	 HCP major key change & un-match with eHRSS	Support (pop-up message in eHR viewer)	Reject	Push mode ¹ – Continue Pull mode ² – Depend

Remarks:

¹For HCP with push mode: eHRSS will start pushing the allergy / ADR data to HCP's eMR / ePR system once the HCP replied eHRSS the major keys are matched upon / after sharing consent. Any subsequent major keys change in HCP will not affect the data download.

²For HCP with pull mode: if the major keys provided by HCP are matched with those in eHRSS (e.g. the HCP requests for data download by eHR major keys), eHRSS will provide the allergy / ADR data; if the major keys provided by HCP are not matched with those in eHRSS (e.g. the HCP requests for data download by HCP major keys, which subsequently changed and not matched with those eHR HRI or eHR HRI change history), eHRSS will not provide the allergy / ADR data and reply HCP with a reason.



eHR data access summary – eHR workflow scenarios

eHR Scenario		Data viewing	Data upload	Data download ¹
Problem record in eHRSS (Interim)		Not support	Accept	Not provide
Problem record in eHRSS (Long term)	🚩	Before data deletion	Not support	Concerned HCP - Reject Other HCPs - Accept
Problem record in eHRSS (Long term)	🚩	After data deletion	Support (pop-up message)	Concerned HCP - Reject Other HCPs – Accept
Problem record in eHRSS (Long term) - Rectified	🚩	Before data deletion	Not support	Accept
Problem record in eHRSS (Interim and Long term) - Rectified	🚩	After data deletion	Support	Accept

Remarks:

¹For HCP with push mode: data download is allowed if major keys are matched with eHRSS upon / after the HCP replying eHRSS on HCR giving sharing consent. For HCP with pull mode: data download is allowed if major keys are matched with eHR HRI or eHR HRI history upon HCP's every single request of data download from eHRSS.

Identity document

list

<https://www.ehealth.gov.hk/en/you-and-your-family/support/supporting-documents.html>

醫健通 eHealth Electronic Health Record Sharing System

What's eHealth You and your family Healthcare provider and professional What's new Contact us

Overview How to register Identity verification Sharing consent 醫健通eHealth API

Identity document

- Hong Kong identity card (HKIC)*
- Adoption Certificate
- Birth Certificate – HK
- Certificate of Exemption
- Travel Documents (such as documents issued by the People's Republic of China or other countries/ regions)
- One-way Permit
- Two-way Permit
- Recognizance
- Macao identity card
- Re-entry Permit**
- Document of Identity for Visa Purposes**
- Consular Corps Identity Card

* Holders of HKIC cannot use other documents such as passports for the Electronic Health Record Sharing System (eHealth) registration.

** For children aged below 12 who do not have HKICs or Hong Kong birth certificates only.

THANK YOU



FHIR mapping for Allergy/ADR & Immunisation

HL7 HONG KONG - 2ND CONNECTATHON

FEB 19, 2024

Topic

- ◆ Resources

- Patient, AllergyIntolerance, Immunization

- ◆ Exchange paradigms - Documents

- Bundle & Composition resources

- ◆ Data field mapping

- Introduction: Extension

FHIR Resources

Categorized	Alphabetical	R2 Layout	By Maturity	Security Category	By Standards Status	By Work Group
Foundation	<p>Conformance</p> <ul style="list-style-type: none"> CapabilityStatement N StructureDefinition N ImplementationGuide 4 SearchParameter 5 MessageDefinition 1 OperationDefinition N CompartimentDefinition 3 StructureMap 4 GraphDefinition 2 	<p>Terminology</p> <ul style="list-style-type: none"> CodeSystem N ValueSet N ConceptMap 3 NamingSystem 4 TerminologyCapabilities 1 	<p>Security</p> <ul style="list-style-type: none"> Provenance 4 AuditEvent 4 Permission 0 Consent 2 	<p>Documents</p> <ul style="list-style-type: none"> Composition 4 DocumentReference 4 	<p>Other</p> <ul style="list-style-type: none"> Basic 3 Binary N Bundle N Linkage 0 MessageHeader 4 OperationOutcome N Parameters N Subscription 3 SubscriptionStatus 2 SubscriptionTopic 2 	
Base	<p>Individuals</p> <ul style="list-style-type: none"> Patient N Practitioner 5 PractitionerRole 4 RelatedPerson 5 Person 4 Group 3 	<p>Entities #1</p> <ul style="list-style-type: none"> Organization 5 OrganizationAffiliation 1 HealthcareService 4 Endpoint 2 Location 5 	<p>Entities #2</p> <ul style="list-style-type: none"> Substance 2 BiologicallyDerivedProduct 2 Device 2 DeviceMetric 1 NutritionProduct 1 	<p>Workflow</p> <ul style="list-style-type: none"> Task 3 Transport 1 Appointment 3 AppointmentResponse 3 Schedule 3 Slot 3 VerificationResult 1 	<p>Management</p> <ul style="list-style-type: none"> Encounter 4 EncounterHistory 0 EpisodeOfCare 2 Flag 1 List 4 Library 4 	
Clinical	<p>Summary</p> <ul style="list-style-type: none"> AllergyIntolerance 3 AdverseEvent 2 Condition (Problem) 5 Procedure 4 FamilyMemberHistory 2 ClinicalImpression 1 DetectedIssue 2 	<p>Diagnostics</p> <ul style="list-style-type: none"> Observation N DocumentReference 4 DiagnosticReport 3 Specimen 2 BodyStructure 1 ImagingSelection 1 ImagingStudy 4 QuestionnaireResponse 5 MolecularSequence 1 GenomicStudy 0 	<p>Medications</p> <ul style="list-style-type: none"> MedicationRequest 4 MedicationAdministration 2 MedicationDispense 2 MedicationStatement 4 Medication 4 MedicationKnowledge 1 Immunization 5 ImmunizationEvaluation 1 ImmunizationRecommendation 1 FormularyItem 0 	<p>Care Provision</p> <ul style="list-style-type: none"> CarePlan 2 CareTeam 2 Goal 2 ServiceRequest 4 NutritionOrder 2 NutritionIntake 1 VisionPrescription 3 RiskAssessment 2 RequestOrchestration 4 	<p>Request & Response</p> <ul style="list-style-type: none"> Communication 2 CommunicationRequest 2 DeviceRequest 1 DeviceDispense 0 DeviceAssociation 0 DeviceUsage 1 BiologicallyDerivedProductDispense 0 GuidanceResponse 2 SupplyRequest 1 SupplyDelivery 1 InventoryItem 0 InventoryReport 0 	

Patient

Structure

Name	Flags	Card.	Type	Description & Constraints
Patient	N		DomainResource	Information about an individual or animal receiving health care services
identifier		Σ	0..*	Identifier Elements defined in Ancestors: id, meta, implicitRules, language, text, contained, extension, modifierExtension
active		Σ	0..1	boolean Whether this patient's record is in active use
name		Σ	0..*	HumanName A name associated with the patient
telecom		Σ	0..*	ContactPoint A contact detail for the individual
gender		Σ	0..1	code male female other unknown Binding: AdministrativeGender (Required)
birthDate		Σ	0..1	date The date of birth for the individual
deceased[x]		Σ	0..1	Indicates if the individual is deceased or not
deceasedBoolean				boolean
deceasedDateTime				dateTime
address		Σ	0..*	Address An address for the individual
maritalStatus			0..1	CodeableConcept Marital (civil) status of a patient Binding: Marital Status Codes (Extensible)

AllergyIntolerance

Structure

Name	Flags	Card.	Type	Description & Constraints
AllergyIntolerance	TU		DomainResource	Allergy or Intolerance (generally: Risk of adverse reaction to a substance) Elements defined in Ancestors: id , meta , implicitRules , language , text , contained , extension , modifierExtension
identifier	Σ	0..*	Identifier	External ids for this item
clinicalStatus	?! Σ	0..1	CodeableConcept	active inactive resolved Binding: AllergyIntolerance Clinical Status Codes (Required)
verificationStatus	?! Σ	0..1	CodeableConcept	unconfirmed presumed confirmed refuted entered-in-error Binding: AllergyIntolerance Verification Status (Required)
type	Σ TU	0..1	CodeableConcept	allergy intolerance - Underlying mechanism (if known) Binding: Allergy Intolerance Type (Preferred)
category	Σ	0..*	code	food medication environment biologic Binding: Allergy Intolerance Category (Required)
criticality	Σ	0..1	code	low high unable-to-assess Binding: Allergy Intolerance Criticality (Required)
code	Σ	0..1	CodeableConcept	Code that identifies the allergy or intolerance Binding: AllergyIntolerance Substance/Product, Condition and Negation Codes (Example)
patient	Σ	1..1	Reference(Patient)	Who the allergy or intolerance is for
encounter		0..1	Reference(Encounter)	Encounter when the allergy or intolerance was asserted
onset[x]		0..1		When allergy or intolerance was identified

Immunization

Structure

Name	Flags	Card.	Type	Description & Constraints
Immunization	TU		DomainResource	Immunization event information
identifier		0..*	Identifier	Elements defined in Ancestors: id, meta, implicitRules, language, text, contained, extension, modifierExtension Business identifier
basedOn	Σ	0..*	Reference(CarePlan MedicationRequest ServiceRequest ImmunizationRecommendation)	Authority that the immunization event is based on
status	?! Σ	1..1	code	completed entered-in-error not-done Binding: Immunization Status Codes (Required)
statusReason		0..1	CodeableConcept	Reason for current status Binding: Immunization Status Reason Codes (Example)
vaccineCode	Σ	1..1	CodeableConcept	Vaccine administered Binding: Vaccine Administered Value Set (Example)
administeredProduct		0..1	CodeableReference(Medication)	Product that was administered
manufacturer		0..1	CodeableReference(Organization)	Vaccine manufacturer
lotNumber		0..1	string	Vaccine lot number
expirationDate		0..1	date	Vaccine expiration date
patient	Σ	1..1	Reference(Patient)	Who was immunized
encounter		0..1	Reference(Encounter)	Encounter immunization was part of

FHIR is a standard, and standards need to evolve

Draft	<p>It is not considered to be complete enough or sufficiently reviewed to be safe for implementation.</p> <p>The content that is <i>Draft</i> that will usually be elevated to <i>Trial Use</i> once review and correction is complete after it has been subjected to ballot</p>
Trial Use	<p>This content has been well reviewed and is considered by the authors to be ready for use in production systems.</p> <p>It is not yet seen widespread use in production</p>
Normative	<p>This content has been subject to review and production implementation in a wide variety of environments.</p> <p>The content is considered to be stable and has been 'locked',</p>
Informative	<p>This portion of the specification is provided for implementer assistance and does not make rules that implementers are required to follow.</p> <p>Typical examples of this content in the FHIR specification are tables of contents, registries, examples, and implementer advice</p>
Deprecated	<p>This portion of the specification is outdated and may be withdrawn in a future version.</p> <p>Implementers who already support it should continue to do so for backward compatibility.</p> <p>Implementers should avoid adding new uses of this portion of the specification.</p>

Maturity Levels

Draft (0)	the resource or profile (artifact) has been published on the current build. This level is synonymous with <i>Draft</i>
FMM 1	PLUS the artifact produces no warnings during the build process and the responsible WG has indicated that they consider the artifact substantially complete and ready for implementation. For resources, profiles and implementation guides, the FHIR Management Group has approved the underlying resource/profile/IG proposal
FMM 2	PLUS the artifact has been tested and successfully supports interoperability among at least three independently developed systems leveraging most of the scope (e.g. at least 80% of the core data elements) using semi-realistic data and scenarios based on at least one of the declared scopes of the artifact (e.g. at a connectathon). These interoperability results must have been reported to and accepted by the FMG
FMM 3	PLUS + the artifact has been verified by the work group as meeting the Conformance Resource Quality Guidelines ; has been subject to a round of formal balloting; has at least 10 distinct implementer comments recorded in the tracker drawn from at least 3 organizations resulting in at least one substantive change
FMM 4	PLUS the artifact has been tested across its scope (see below), published in a formal publication (e.g. Trial-Use), and implemented in multiple prototype projects. As well, the responsible work group agrees the artifact is sufficiently stable to require implementer consultation for subsequent non-backward compatible changes
FMM 5	the artifact has been published in two formal publication release cycles at FMM1+ (i.e. Trial-Use level) and has been implemented in at least 5 independent production systems in more than one country
Normative	the artifact is now considered stable

Example

For Resource Patient:

- Maturity Level is **Normative**
- Standard Level is **Normative** (Considered to be stable)

The screenshot shows the FHIR Patient resource page. At the top, there is a navigation bar with a user icon and the path 'Administration > Patient'. Below this is a yellow banner containing versioning information. The main content area has a tab navigation bar with 'Content' selected (highlighted in red). The 'Content' section is titled '8.1 Resource Patient - Content'. Below this, there is a horizontal bar with several status indicators. The 'Maturity Level: N Normative (from v4.0.0)' indicator is highlighted with a red box. The other indicators include 'Patient Administration Work Group', 'Security Category: Patient', and 'Compartments: Patient, Practitioner, RelatedPerson'. A descriptive text follows, stating: 'Demographics and other administrative information about an individual or animal receiving care or other health-related services.'

8.1.1 Scope and Usage

This Resource covers data about patients and animals involved in a wide range of health-related activities, including:

- Curative activities
- Psychiatric care
- Social services
- Pregnancy care

For Resource AllergyIntolerance:

- Maturity Level is **3**
- Standard Level is **Trial Use**

 Clinical Summary > AllergyIntolerance

This page is part of the FHIR Specification (v5.0.0: R5 - STU). This is the current published version. For a full list of available versions, see the [Directory of published versions](#). Page versions: [R5](#) [R4B](#) [R4](#) [R3](#) [R2](#)

[Content](#) [Examples](#) [Detailed Descriptions](#) [Mappings](#) [Operations](#) [Search Params](#) [Profiles](#) [Extensions](#) [R4 Conversions](#)

9.1 Resource AllergyIntolerance - Content

Patient Care [Work Group](#) Maturity Level: 3 Trial Use Security Category: Patient Compartments: Patient, Practitioner, RelatedPerson

Risk of harmful or undesirable physiological response which is specific to an individual and associated with exposure to a substance.

9.1.1 Scope and Usage

A record of a clinical assessment of an allergy or intolerance; a propensity, or a potential risk to an individual, to have an adverse reaction on future exposure to the specified substance, or class of substance.

Where a propensity is identified, to record information or evidence about a reaction event that is characterized by any harmful or undesirable physiological response that is specific to the individual and triggered by exposure of an individual to the identified substance or class of substance.

Substances include, but are not limited to: a therapeutic substance administered correctly at an appropriate dosage for the individual; food; material derived from plants or animals; or venom from insect stings.

For Resource Immunization:

- Maturity Level is ? -> 5
- Standard Level is ? -> Trial Use

The screenshot shows the FHIR Specification page for the Immunization resource. At the top, there is a navigation bar with a medication icon and the text "Medications > Immunization". Below this is a yellow banner containing the text: "This page is part of the FHIR Specification (v5.0.0: R5 - STU). This is the current published version. For a full list of available versions, see the [Directory of published versions](#). Page versions: R5 R4B R4 R3 R2". A red box highlights the "Maturity Level: 5" and "Trial Use" buttons in the breadcrumb navigation bar below the banner. The main content area is titled "11.7 Resource Immunization - Content". At the bottom of the content area, there is a horizontal bar with several items: "Public Health and Emergency Response Work Group", "Maturity Level: 5" (which is highlighted with a red box), "Trial Use", "Security Category: Patient", and "Compartments: Patient, Practitioner".

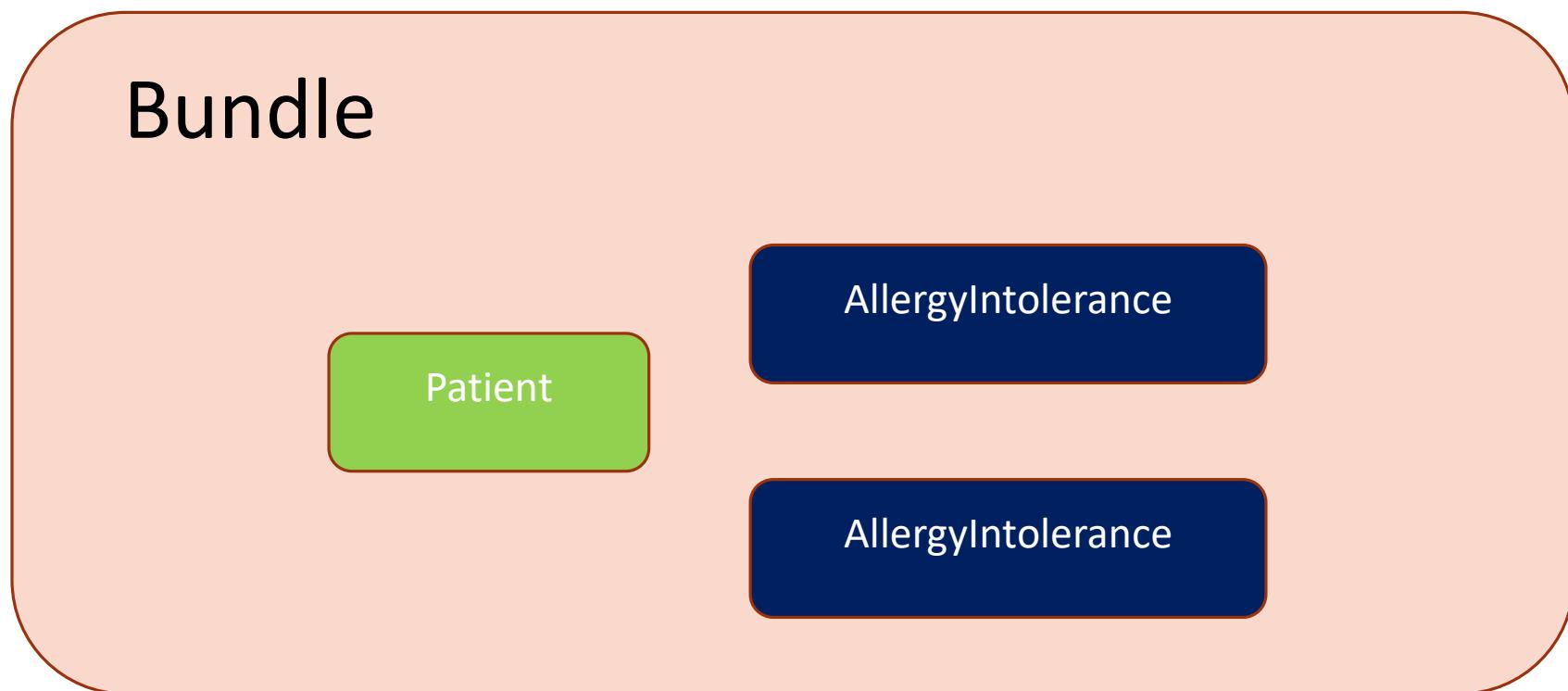
Describes the event of a patient being administered a vaccine or a record of an immunization as reported by a patient, a clinician or another party.

11.7.1 Scope and Usage

The Immunization resource is intended to cover the recording of current and historical administration of vaccines to patients across all healthcare disciplines in all care settings and all regions. This includes immunization of both humans and animals but does not include the administration of non-vaccine agents, even those that may have or claim to have immunological effects. While the terms "immunization" and "vaccination" are not clinically identical, for the purposes of the FHIR resources, the terms are used synonymously.

Resource - Bundle

“A container for a collection of resources”



FHIR Exchange paradigms

- RESTful API
- Messaging
- Documents
- Services

FHIR Documents

Exchange > Documents

This page is part of the FHIR Specification (v5.0.0: R5 - [STU](#)). This is the current published version. For a full list of available versions, see the [Directory of published versions](#)
🕒 Page versions: [R5](#) [R4B](#) [R4](#) [R3](#) [R2](#)

3.4 FHIR Documents

FHIR Infrastructure Work Group	Maturity Level: 3	Standards Status: Trial Use
--	-------------------	-----------------------------

FHIR resources can be used to build documents that represent a composition: a coherent set of information that is a statement of healthcare information, including clinical observations and services. A document is a set of resources with a fixed presentation that is authored and/or attested by humans, organizations and devices.

A FHIR document instance is a [Bundle](#) of type [document](#) that starts with a [Composition](#) and contains specific frozen versions of other resources. Changes to a document Bundle may risk invalidating the attestation present within the document. Implementations SHOULD have policies around when documents can be 'updated' (new version of the same instance) vs. when a distinct document needs to be created, as well as what types of change are permitted, in order to retain attestation validity. These rules might vary based on the type of document (e.g. legal documents, clinical documents, etc.).

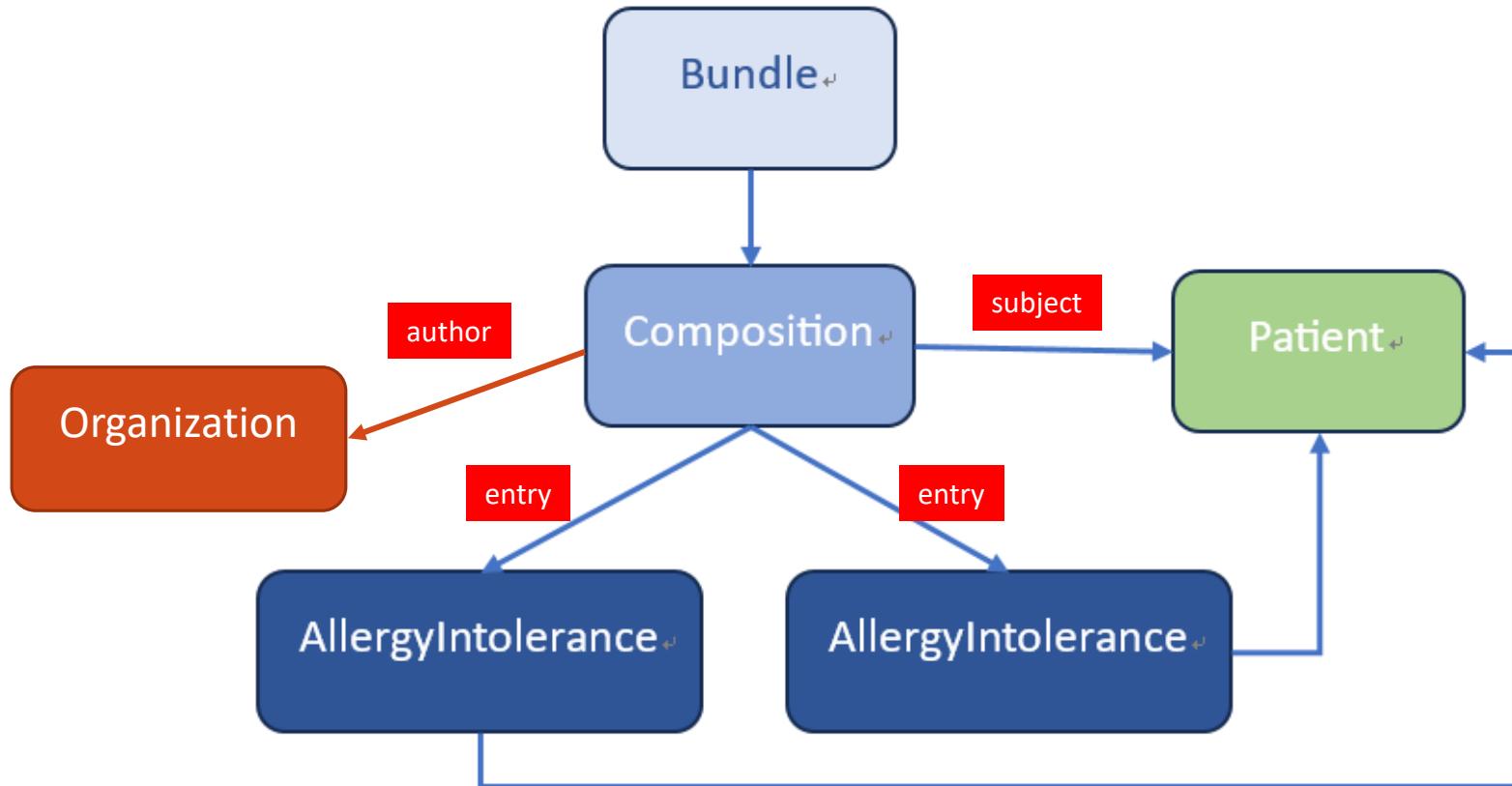
Documents built in this fashion may be exchanged between systems and persisted in document storage and management systems, including systems such as [IHE XDS](#).

Bundle.type=document

Document Structure

Resources referenced by the Composition as listed below SHALL be included in the bundle when the document is assembled:

- [Composition.subject](#)
- [Composition.encounter](#)
- [Composition.author](#)
- [Composition.attester.party](#)
- [Composition.custodian](#)
- [Composition.section.author](#)
- [Composition.section.focus](#)
- [Composition.section.entry](#)



Data mapping for Healthcare Recipient (HCR)

Structure

Name	Flags	Card.	Type	Description & Constraints	?
Patient	N		DomainResource	Information about an individual or animal receiving health care services	
identifier	Σ	0..*	Identifier	Elements defined in Ancestors: id, meta, implicitRules, language, text, contained, extension, modifierExtension An identifier for this patient	
active	?!	Σ	0..1	boolean	Whether this patient's record is in active use
name	Σ	0..*	HumanName	A name associated with the patient	
telecom	Σ	0..*	ContactPoint	A contact detail for the individual	
gender	Σ	0..1	code	male female other unknown Binding: AdministrativeGender (Required)	
birthDate	Σ	0..1	date	The date of birth for the individual	
deceased[x]	?!	Σ	0..1	Indicates if the individual is deceased or not	
deceasedBoolean			boolean		
deceasedDateTime			dateTime		
address	Σ	0..*	Address	An address for the individual	
maritalStatus		0..1	CodeableConcept	Marital (civil) status of a patient Binding: Marital Status Codes (Extensible)	

Patient Example

```
  "identifier": [
    {
      "type": {
        "coding": [
          {
            "system": "http://ehealth.gov.hk/FHIR/typeofID-ext",
            "code": "EHRNO"
          }
        ]
      },
      "value": "944272043043" ← eHR number
    },
    {
      "type": {
        "coding": [
          {
            "system": "http://ehealth.gov.hk/FHIR/typeofID-ext",
            "code": "ID"
          }
        ]
      },
      "value": "YD1298051" ← HKIC number
    }
  ],
  "name": [
    {
      "text": "CHAN, TAI MAN", ← English full name
      "family": "CHAN", ← English surname
      "given": [
        "TAI MAN" ← English given name
      ]
    }
  ],
  "gender": "male", ← Sex
  "birthDate": "2000-08-04" ← Date of birth
}
```

Code value mapping

Sex

Purpose : to indicate the sex of a person

Reference : OGCIO (HL7)



male | female | other | unknown

Binding: [AdministrativeGender \(Required\)](#)

Term ID	eHR Value	eHR Description	Patient.gender
9050135	F	Female	female
9050253	M	Male	male
9050467	U	Unknown sex	unknown

Data Mapping for Allergy



Type of allergen code
Type of allergen description
Type of allergen local description
Allergen - recognised terminology name
Allergen identifier - recognised terminology
Allergen description - recognised terminology
Allergen local code
Allergen local description
Level of certainty code
Level of certainty description
Level of certainty local description
Allergic reaction code
Allergic reaction description
Allergic reaction local description
Delete allergen reason
Allergen remark



AllergyIntolerance.clinicalStatus
AllergyIntolerance.verificationStatus
AllergyIntolerance.type
AllergyIntolerance.category
AllergyIntolerance.criticality
AllergyIntolerance.code
AllergyIntolerance.patient
AllergyIntolerance.encounter
AllergyIntolerance.onset[x]
AllergyIntolerance.recordedDate
AllergyIntolerance.recorder
AllergyIntolerance.asserter
AllergyIntolerance.lastOccurrence
AllergyIntolerance.note
AllergyIntolerance.reaction
AllergyIntolerance.reaction.substance
AllergyIntolerance.reaction.manifestation
AllergyIntolerance.reaction.description
AllergyIntolerance.reaction.onset
AllergyIntolerance.reaction.severity
AllergyIntolerance.reaction.exposureRoute
AllergyIntolerance.reaction.note



Type of allergen code	?
Type of allergen description	?
Type of allergen local description	?
Allergen - recognised terminology name	
Allergen identifier - recognised terminology	
Allergen description - recognised terminology	
Allergen local code	
Allergen local description	
Level of certainty code	
Level of certainty description	
Level of certainty local description	
Allergic reaction code	
Allergic reaction description	
Allergic reaction local description	
Delete allergen reason	?
Allergen remark	

AllergyIntolerance.clinicalStatus
AllergyIntolerance.verificationStatus
AllergyIntolerance.type
AllergyIntolerance.category
AllergyIntolerance.criticality
AllergyIntolerance.code
AllergyIntolerance.patient
AllergyIntolerance.encounter
AllergyIntolerance.onset[x]
AllergyIntolerance.recordedDate
AllergyIntolerance.recorder
AllergyIntolerance.asserter
AllergyIntolerance.lastOccurrence
AllergyIntolerance.note
AllergyIntolerance.reaction
AllergyIntolerance.reaction.substance
AllergyIntolerance.reaction.manifestation
AllergyIntolerance.reaction.description
AllergyIntolerance.reaction.onset
AllergyIntolerance.reaction.severity
AllergyIntolerance.reaction.exposureRoute
AllergyIntolerance.reaction.note

“Type of Allergen” / AllergyIntolerance.type

Type of allergen

Purpose: to define the type of allergen

Reference: Hospital Authority

Term ID	eHR Value	eHR Description
9050114	Drug	Drug allergen
9050299	Non-drug	Non-drug allergen
9050461	Unclassify	Unclassify type of allergen

This value set contains 2 concepts

Expansion based on [Allergy Intolerance Type v5.0.0 \(CodeSystem\)](#)

Code	System	Display	Definition
allergy	http://hl7.org/fhir/allergy-intolerance-type	Allergy	A propensity for hypersensitive reaction(s) to a substance. These reactions are most typically type I hypersensitivity, plus other "allergy-like" reactions, including pseudoallergy.
intolerance	http://hl7.org/fhir/allergy-intolerance-type	Intolerance	A propensity for adverse reactions to a substance that is judged to be not allergic or "allergy-like". These reactions are typically (but not necessarily) non-immune. They are to some degree idiosyncratic and/or patient-specific (i.e. are not a reaction that is expected to occur with most or all patients given similar circumstances).

Extensibility

2.1.5.0.1 Extension Element

Every resource or datatype element may include one or more "extension" child elements. The extension is either *simple* or *complex*. Simple extensions have only a value and no nested extensions. Complex extensions contain one or more nested extensions and no value. An extension can not have both a value and nested extensions.

The Extension definition is shown below:

Structure	UML	XML	JSON	Turtle	R4 Diff	All
Structure						
Name						
Extension	N		Element			
Description & Constraints						
			Optional Extensions Element			
			+ Rule: Must have either extensions or value[x], not both			
Elements defined in Ancestors: id, extension						
url		1..1	uri			
			identifies the meaning of the extension			
value[x]	C	0..1	*			
			Value of extension			
Documentation for this format						
Definition: XML JSON						

```

"resourceType": "AllergyIntolerance",
"id": "947a8c5c-3ef2-46ba-b819-e2c6d936d75e",
"extension": [
  {
    "url": "http://ehealth.gov.hk/FHIR/1003138-Typeofallergencode",
    "valueString": "Drug"
  },
  {
    "url": "http://ehealth.gov.hk/FHIR/1003139-Ty",
    "valueString": "Drug allergen"
  },
  {
    "url": "http://ehealth.gov.hk/FHIR/1003140-Ty",
    "valueString": "Drug allergy"
  },
  {
    "url": "http://ehealth.gov.hk/FHIR/1003145-De",
    "valueString": "Typo"
  }
]

```

← → C ehealth.gov.hk/filemanager/content/pdf/en/ehris/annex/appendix-a-vi-ehr

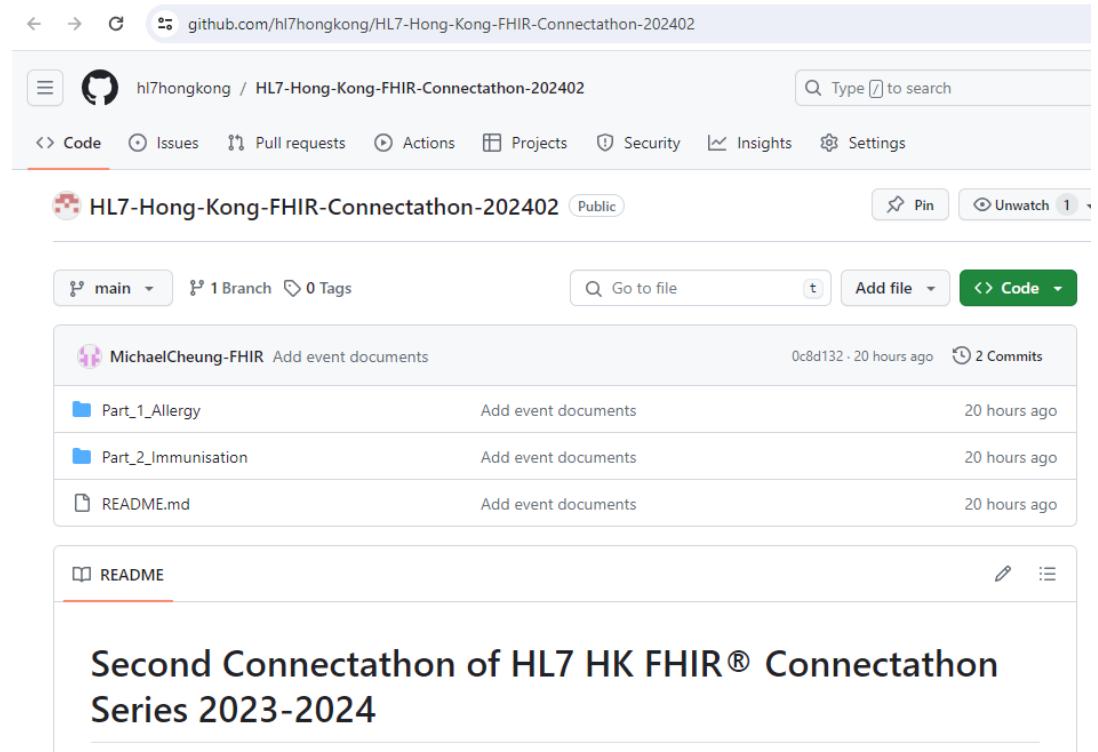
Allergy | 敏感

Entity ID	Entity Name	Definition
1003138	Type of allergen code	[eHR value] of the "Type of allergen" code table. Type of allergen is to indicate whether the allergen is drug related or not.
1003139	Type of allergen description	[eHR description] of the "Type of allergen" code table. It should be the corresponding description of the selected [Type of allergen code]. Type of allergen is to indicate whether the allergen is drug related or not.
1003140	Type of allergen local description	Local description created by the healthcare provider for reporting the type of allergen. Type of allergen is to indicate whether the

Challenge

Specifications

- Specifications can be found at
 - <https://github.com/hl7hongkong/HL7-Hong-Kong-FHIR-Connectathon-202402>



Exercise

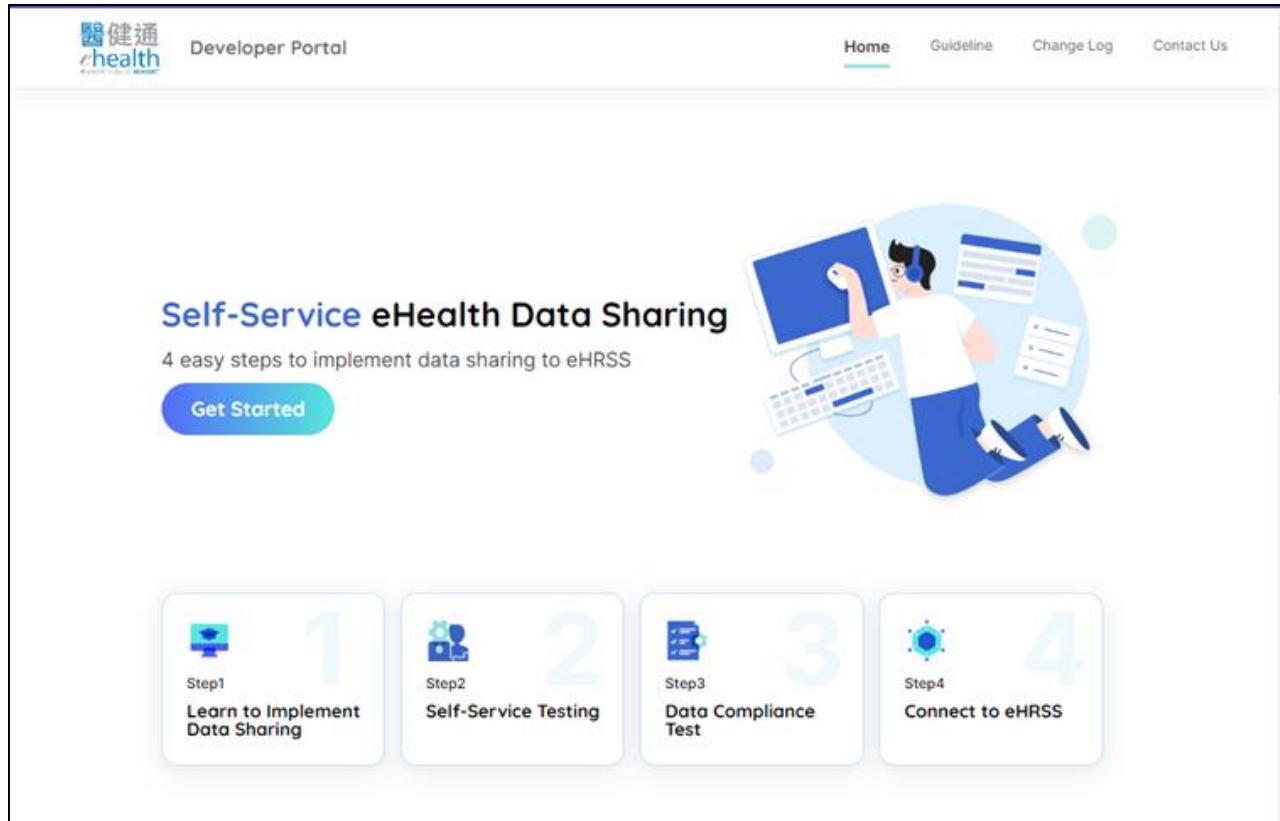
- Following the instructions at the GitHub
 - Submit the answers via
 - Fork the repository by pull request and update the related files
 - Google Form
 - <https://forms.gle/GmWosEDzA8kwbqNf9>

Format of the exercise

- Based on the sample messages, find out the data, e.g.
 - Type of allergen code
 - Allergen local description, local description
 - Allergic reaction code, reaction description

- Fill in the “Immunization” resource into message template

Before Discussion: Developer Portal (coming up)



- **Promotional public website** for self-service data sharing implementation
- Allow the public to **learn it online**, and **understand the conformance process** of data sharing implementation
- Allow to download a set of **documents** required in the self-service implementation

Open Discussion

Closing remarks

By Mr Pascal Tse (Vice Chairman, HL7 Hong Kong)

Connectathon Series 2023 - 2024

Second FHIR Connectathon

Topics: Allergy/ADR, Immunisation

- Part 1: Face to face Session (19 Feb 2024)
- Part 2: Online Follow-up Meetings

Zoom Sessions	Time
(1) February 23, 2024	Time: 7pm
(2) February 26, 2024	Time: 7pm

What's next?

Proposed Schedule of Connectathon

	Date	Topics
1	Nov 2023	Patient Encounter, Medication, GOPC PPP data download
2	Feb 2024	Allergy/ADR, Immunisation
3	Mar – Apr 2024	Problem, Procedure
4	May – Jun 2024	Clinical Note / Summary, Investigation report, Referral, Medical Certificate
5	Jul – Aug 2024	Laboratory, Radiology
6	Sep – Oct 2024	Chinese Medicine

See you soon
