

HL7 Hong Kong FHIR® Connectathon Series 2024

FOURTH CONNECTATHON

5 AUG 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: Clinical Note / Summary, Investigation report, Referral, Medical Certificate

Programme	Speaker
Update on eHealth+	Louise Wong Health Informatics Analyst I, HA
Dataset briefing for Clinical Note / Summary, Investigation report, Referral, Medical Certificate	Rex Yiu Health Informatics Analyst I, HA
FHIR mapping for Clinical Note / Summary, Investigation report, Referral, Medical Certificate	Michael Cheung Systems Manager, HA
Open discussion	

- Fully supported by Electronic Health Record Office

Update on eHealth+

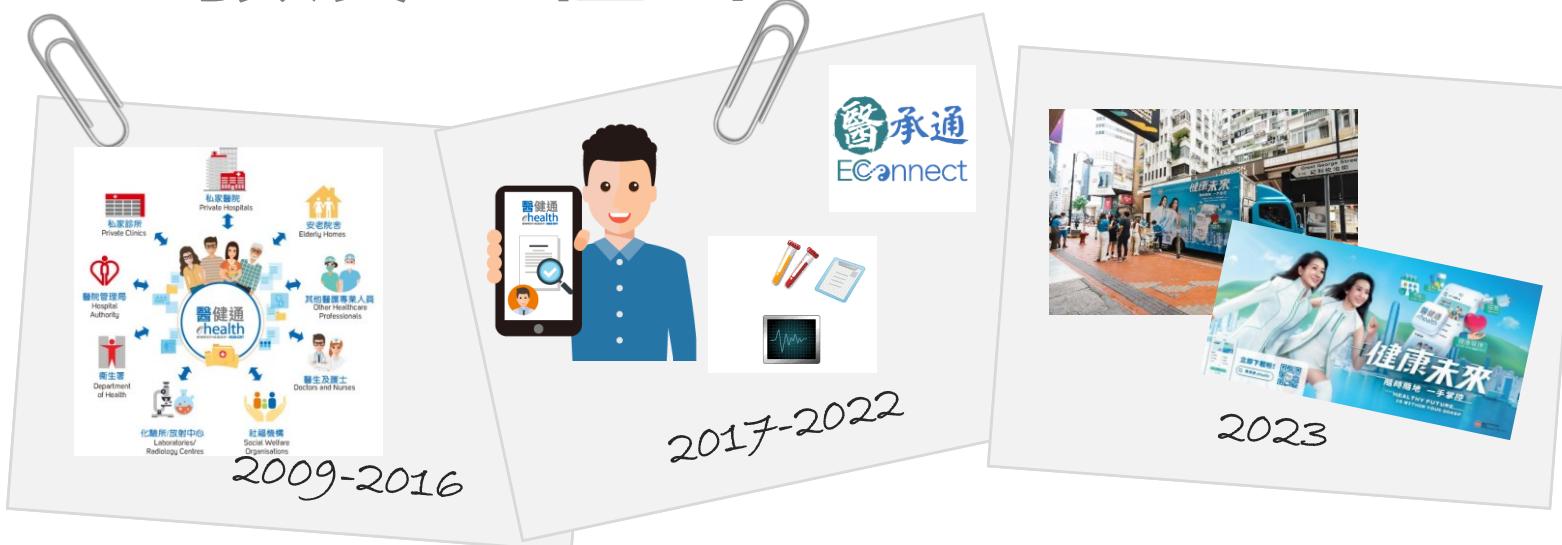
By Ms Louise Wong (Health Informatics Analyst I, Hospital Authority)

eHealth+ Introduction

Fourth Connectathon of HL7 HONG KONG FHIR®
Connectathon Series 2023-2024
05 Aug 2024



發展里程碑



第一及第二階段發展 2009-2022

今日醫健通 2024

醫健通 + 2024 - 2028

- 《電子健康紀錄互通系統條例》(2015)
- 電子健康紀錄互通平台(2016)
- 醫健通流動應用程式(2021)

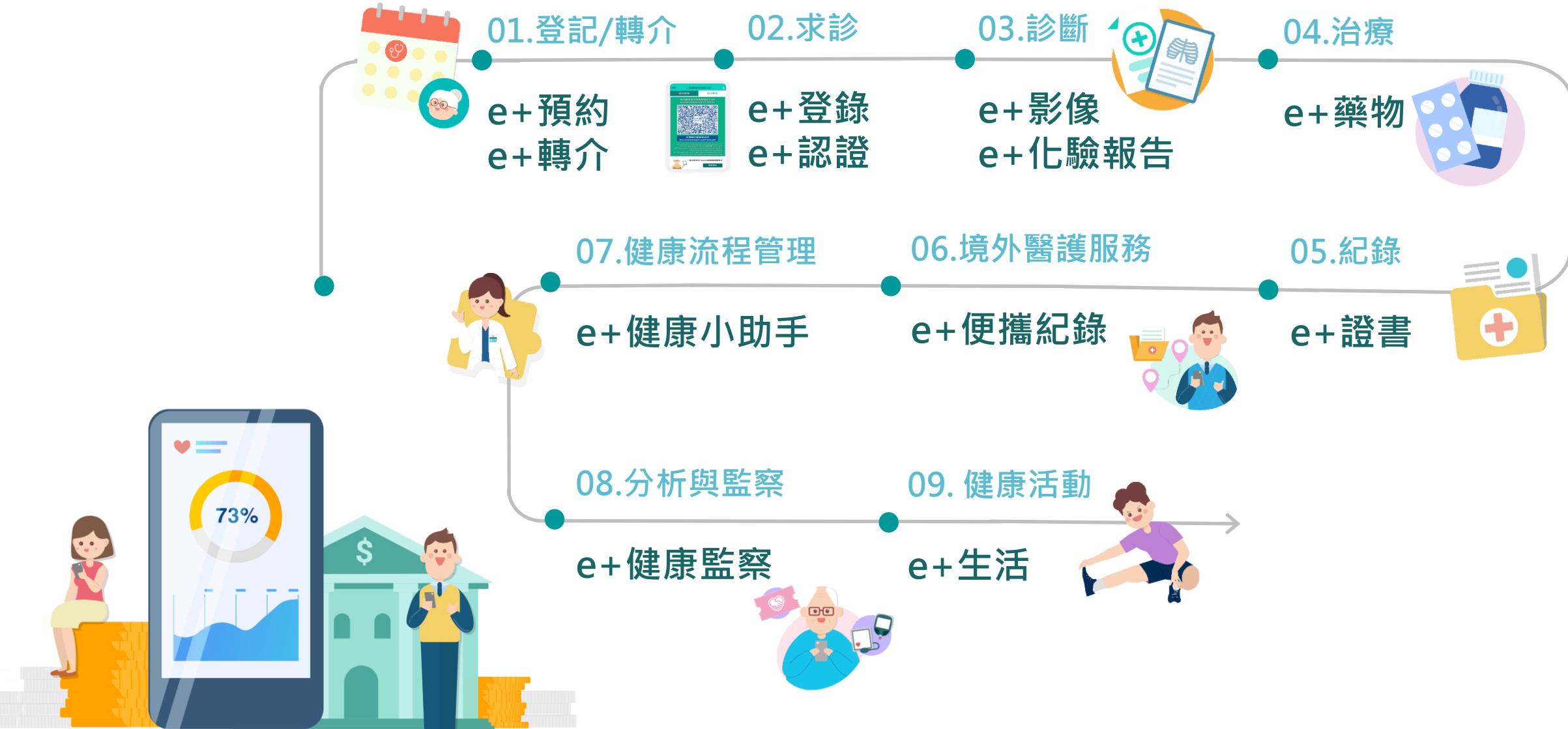
- **600萬登記人數**
- **320萬醫健通流動應用程式下載量**
- 每月取覽量**240 000次**

- 集醫療數據互通、服務提供及流程管理於一身的**綜合醫療資訊基建**

未來醫療發展趨勢



醫健通+支援個人治理流程的核心功能



醫健通 health

你好，病人奇異果

預約紀錄 / 系統

未來 過去

+ 預約紀錄 + 立即預約

醫健通紀錄

2023年12月24日 星期日 下午 02:30

門診

醫健通紀錄

2023年12月24日 星期日 下午 12:30

ALIANTV WEATLUPADE OLIVEINTUEDAOV

搜尋結果

HEALTHCARE MEDICAL CENTRE LIMITED TEST
HEALTHCARE MEDICAL CENTRE LIMITED TEST

醫護服務地點 供參考的醫護機構

TESTING HEALTHCARE MEDICAL CENTRE (SHATIN-NEW TOWN TOWER)_test
醫療中心 (沙田-新城市商業大廈)_test

HEALTHCARE MEDICAL CENTRE LIMITED TEST
HEALTHCARE MEDICAL CENTRE LIMITED TEST

供參考的醫護機構 (0)

+ 立即預約

查閱互通同意紀錄

e+ 預約/e+ 轉介



一站式、全天候電子預約

- 市民:** 預約公、私營醫護服務、接收提醒信息
- 醫護:** 排期、資源分配、確保緊急需要的病人獲得及時治理



e+登錄/e+認證



個人醫健通二維碼

- 快速、非接觸式的身份識別和驗證

醫健通
e-health

你好，病人奇異果 ◉

檢查紀錄

此流動應用程式會顯示由私營醫護機構上載的一般常規檢查的診斷化驗紀錄。紀錄一般會稍後（約14日）發佈。

選擇年份

您亦可登入HA GO 查閱您在醫院管理局的紀錄 [前往](#)

2023

RBC Count >
金域檢驗(香港)有限公司_test
2023年10月19日

Brain plain CT >
金域檢驗(香港)有限公司_test
2023年10月19日

構想圖像僅作參考之用

< 化驗紀錄

CBP
金域檢驗(香港)有限公司_test
2023年10月19日

報告

Laboratory Test (Reference Range)	Results Unit
Haemoglobin, Blood (11.7 - 14.9)	12.5 g/dL
WBC (3.7 - 9.2)	11.7 $\times 10^9/L$
Platelet (145 - 370)	271 $\times 10^9/L$
MCV (82.0 - 97.0)	91.4 fL
MCH (27.0 - 33.0)	31.5 pg
MCHC (32.0 - 35.0)	34.4 g/dL

< 影像報告

X光造影報告
ABC 造影中心
2023年10月2日

e+影像/e+化驗報告



電子檢測報告

- 隨時隨地、永久取覽
- 方便進行分析及比較、節省重複檢測成本、省卻保存紙本和影像報告的不便



e+藥物



電子藥物管理

- 收集所有藥物紀錄，透過系統進行核對，提高藥物安全性
- 新服務模式：藥品整合、補給、送遞、用藥提醒、遙距醫療



e+ 證書



電子醫療證明書

- 隨時隨地、永久取覽
- 省卻保存紙本的不便

我的健康記錄

文件
abc_lab_report.pdf

簽發（醫療保健提供者）
ABC 診所

簽發日期
2023 一月 21

描述

上載

My Health Record

資料夾容量
15 / 100 Mb

+ 上傳健康記錄文件

abc_lab_report.pdf
上傳日期: 21/06/2023
處理中
10MB

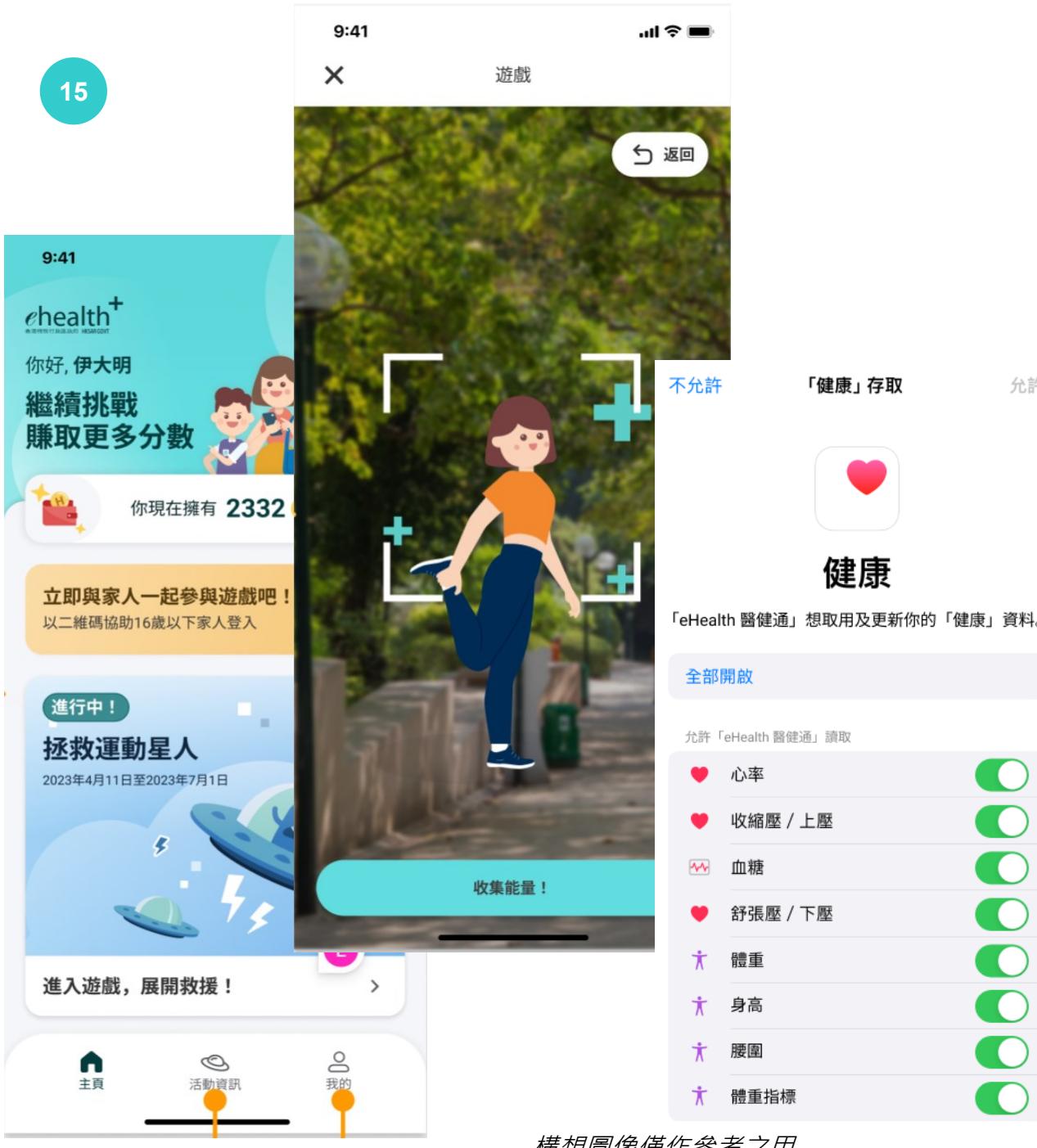
XXX_doc.pdf
上傳日期: 22/05/2023
完成
5MB

e+ 便攜紀錄



跨境電子健康紀錄

- 取覽健康紀錄
- 上載境外電子病歷



e+ 健康監察、 e+生活



個人綜合健康工具

- 管理醫護服務流程
- 掌握健康信息
- 監測健康狀況
- 建立健康生活習慣

個人終身電子健康紀錄



謝謝



Dataset briefing for Clinical Note / Summary, Investigation report, Referral, Medical Certificate

By Mr Rex Yiu (Health Informatics Analyst I, Hospital Authority)

Information Standards Clinical Note / Summary

2024.07

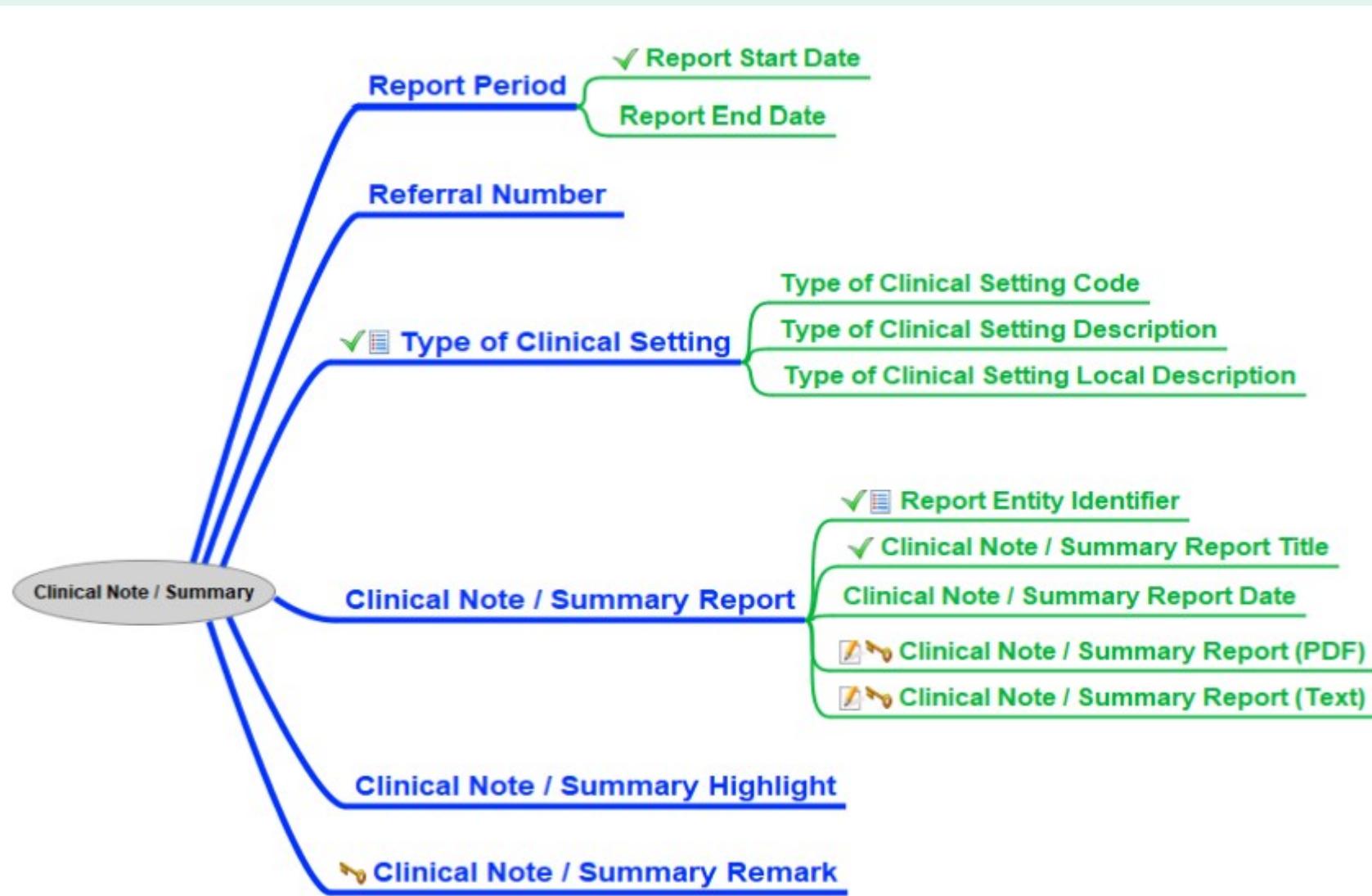
Aim

- To introduce the information standards of eHRSS domain:
 - Clinical note / summary

Clinical Note / Summary

- Contains information that record/summarize the followings of a **particular clinical encounter/episode**:
 - **Reason** originates the encounter/episode
 - **ADR, allergies and clinical alert**
 - *these info should also be separately sent to eHRSS as the appropriate section*
 - **Major diagnostics**
 - **Problems**
 - **Significant procedures & therapeutic treatment**, e.g. medication
 - **Healthcare recipient's condition, therapeutic orders or treatment plan**
 - **FU, education** to healthcare recipient/family, etc
- Level 1 data

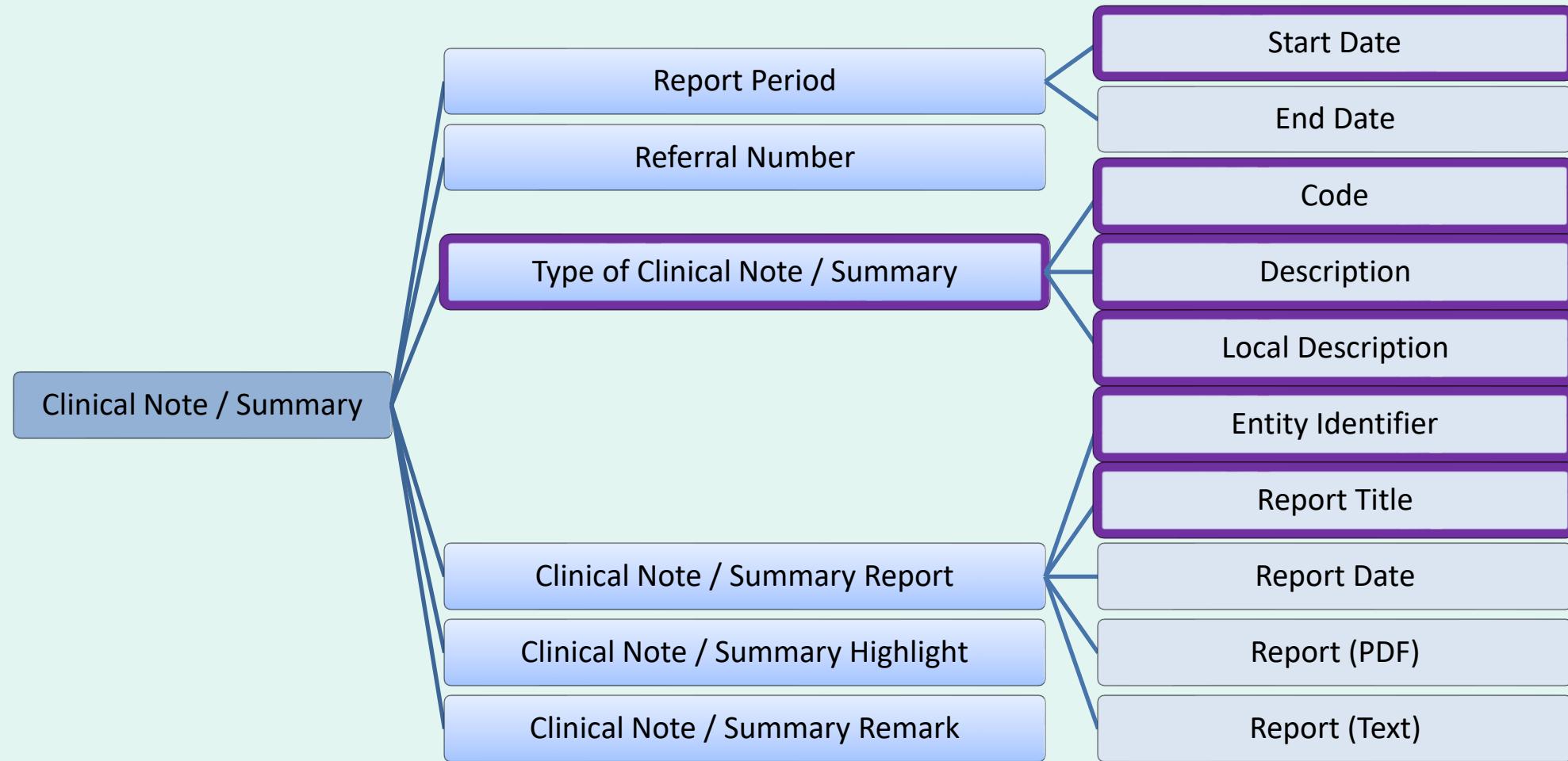
Mindmap



Legend

- ✓ Mandatory for all Levels
- ① Mandatory for Level 1
- ② Mandatory for Level 2
- ③ Mandatory for Level 3
- 📝 Conditional mandatory
- 🔁 Repeated data
- 🔒 Encrypted eHR storage
- 📋 Code table
- ⭐ Recognised terminology

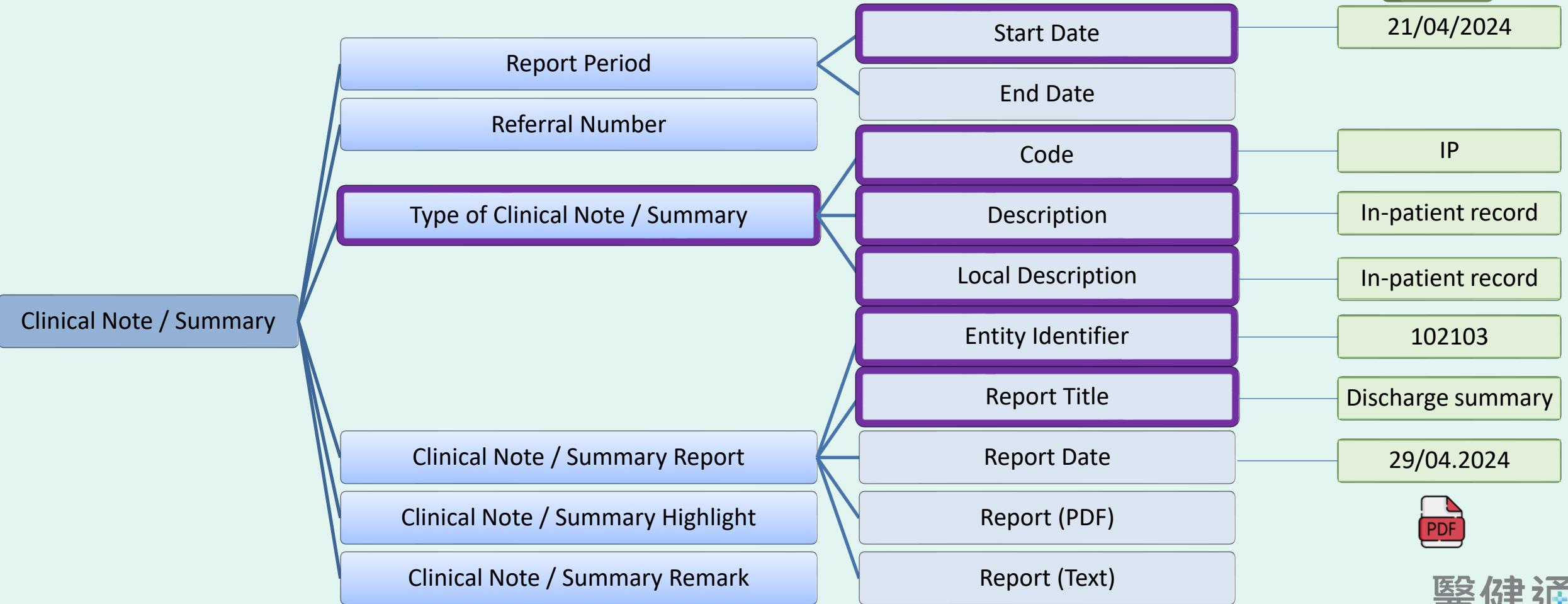
Clinical Note / Summary



Mandatory – all levels

Clinical Note / Summary: Level 1 Example

EXAMPLE



Mandatory – all levels

Codex: Type of Clinical Note / Summary

Type of clinical setting

Purpose : To indicate type of clinical setting

Source : HA ePR

Term ID	eHR Value	eHR Description	Definition
9050002	AE	Accident and emergency record	Record generated during receiving care in Accident and Emergency Department
9050329	OP	Outpatient record	Record generated during out-patient attendance
9050198	IP	Inpatient record	Record generated during inpatient care
9050321	OTH	Other record	Record generated with unidentified healthcare service type is received

Codex: Clinical Report List

Clinical report list

Purpose : To list out the clinical records sharing to eHRSS clinical note/summary domain

Reference: from Information Architecture Management System (IAMS) Entity module

Term ID	eHR Value	eHR Description
9050565	102727	Cataract operation record
9050566	102734	Cataract post-operation record
9050567	102733	Cataract pre-operation record
9050613	1006719	Clinical summary
9050568	1004654	Colon assessment Public-Private Partnership Programme clinical summary
9050569	1006487	Colorectal Cancer Screening Programme colonoscopy summary
9050570	1006488	Colorectal Cancer Screening Programme screening summary
9050574	1001705	Diabetic complication screening report
9050571	102103	Discharge summary
9050572	1001880	Haemodialysis Public-Private Partnership Programme treatment summary
9050573	1004438	Metabolic risk assessment report
9050575	102619	Neonatal hearing screening report
9050576	102105	Nursing discharge summary report
9050736	1007841	Nursing outpatient note
9050616	1002786	Occupational therapy discharge summary
9050737	1007842	Occupational therapy outpatient note
9050577	1001878	Patient empowerment profile progress summary
9050615	1002785	Physiotherapy discharge summary
9050742	1007847	Physiotherapy outpatient note
9050578	102888	Primary care outpatient consultation note
9050579	102497	Smoking counselling and cessation report

Related File

- Data scheme & codex
 - Available in eHealth.gov.hk

Level 1 Example

Entity Name	Definition	Code Table	Data requirement (Certified Level 1)	Example (Certified Level 1)
Report start date	The start date of the period in which the clinical note/summary intended to cover. For example, this can be the admission date for inpatient episode.		M	09/12/2010
Report end date	The end date of the period in which the clinical note/summary intended to cover. For example, this can be the discharge date for inpatient episode.		O	16/09/2010
Referral number	A unique identifier issued by the healthcare institution who referred the healthcare recipient to the performing / visited institution. This number will be served as a part of the eReferral number for eReferral.		O	20150001
Type of clinical note / summary code	[eHR value] defined in "Type of clinical note / summary" code table. Type of clinical note/summary is the type of clinical service, e.g. inpatient, outpatient, under which the clinical note/summary is created.	Type of clinical note / summary	M	IP
Type of clinical note / summary description	[eHR description] defined in "Type of clinical note / summary" code table, it should be the corresponding description of the selected [Type of clinical note / summary code]. Type of clinical note/summary is the type of clinical service, e.g. inpatient, outpatient, under which the clinical note/summary is created.	Type of clinical note / summary	M	In-patient record
Type of clinical note / summary local description	The local description of the type of clinical note/summary which is the type of clinical service, e.g. inpatient, outpatient, under which the clinical note/summary is created.		M	Hospitalisation record
Report entity identifier	The [eHR value] defined in "Clinical report list" codex. A unique identifier issued by eHR ISO for indicating the specific kind of clinical notes / investigation reports sharing to eHRSS. This identifier will be used for facilitating reports searching or filtering in eHR viewer.	Clinical report list	M	102103
Clinical note / summary report title	Report title of the clinical note / summary		M	Discharge summary
Clinical note / summary report date	The documentation date of the clinical note / summary report. If this documentation date is not available, use the report creation date		O	01/02/2012
Clinical note / summary report (PDF)	Clinical note / summary report in Portable Document Format (PDF)		M if [Clinical note / summary report (Text)] is blank	
Clinical note / summary report (Text)	Clinical note / summary report in text format		M if [Clinical note / summary report (PDF)] is blank	
Clinical note / summary highlight	Summary of important information for the clinical note / summary, e.g. important findings		O	Fever for Ix
Clinical note / summary remark	The additional information about the clinical note / summary		O	abc

Information Standards Investigation

2024.07

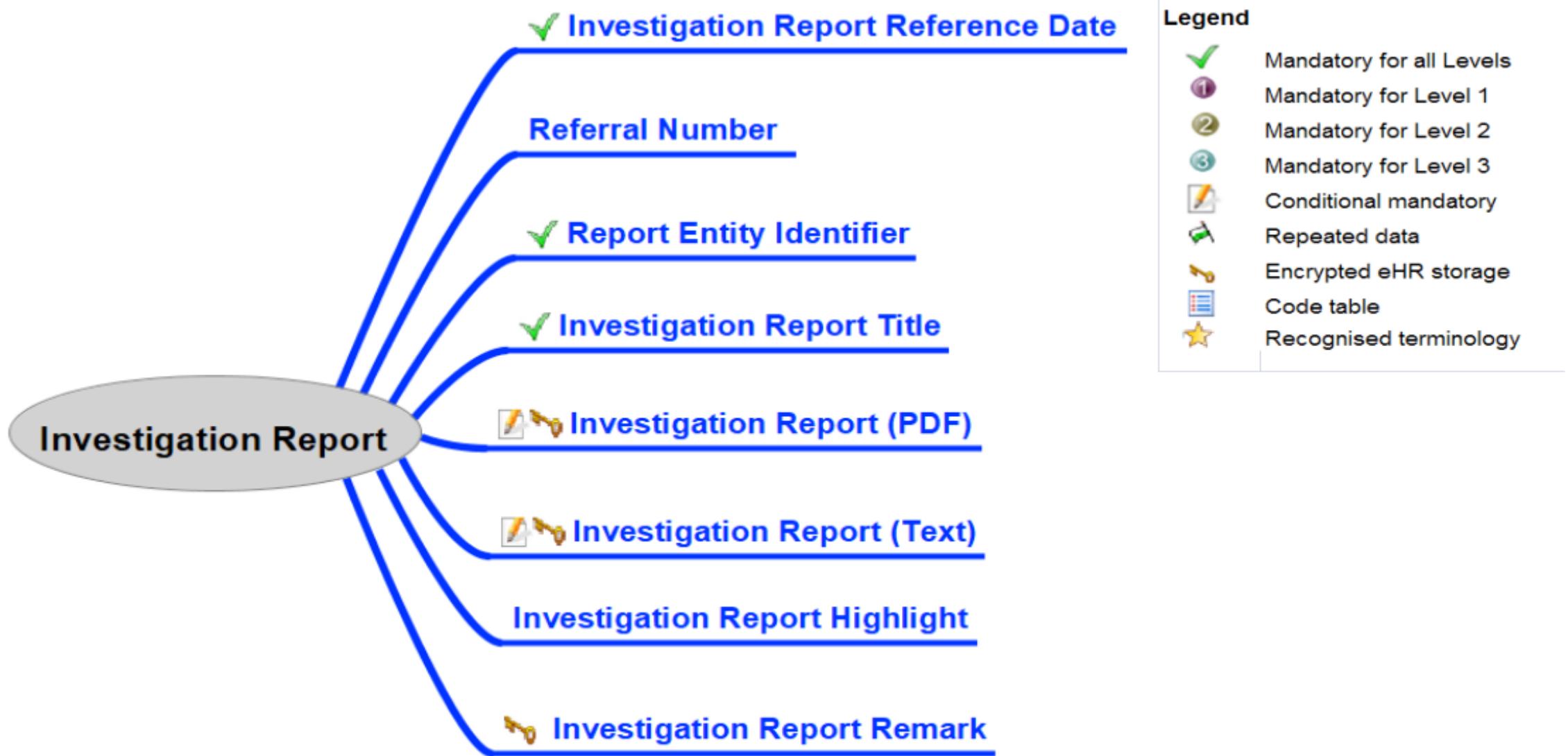
Aim

- To introduce the information standards of eHRSS domain:
 - Investigation

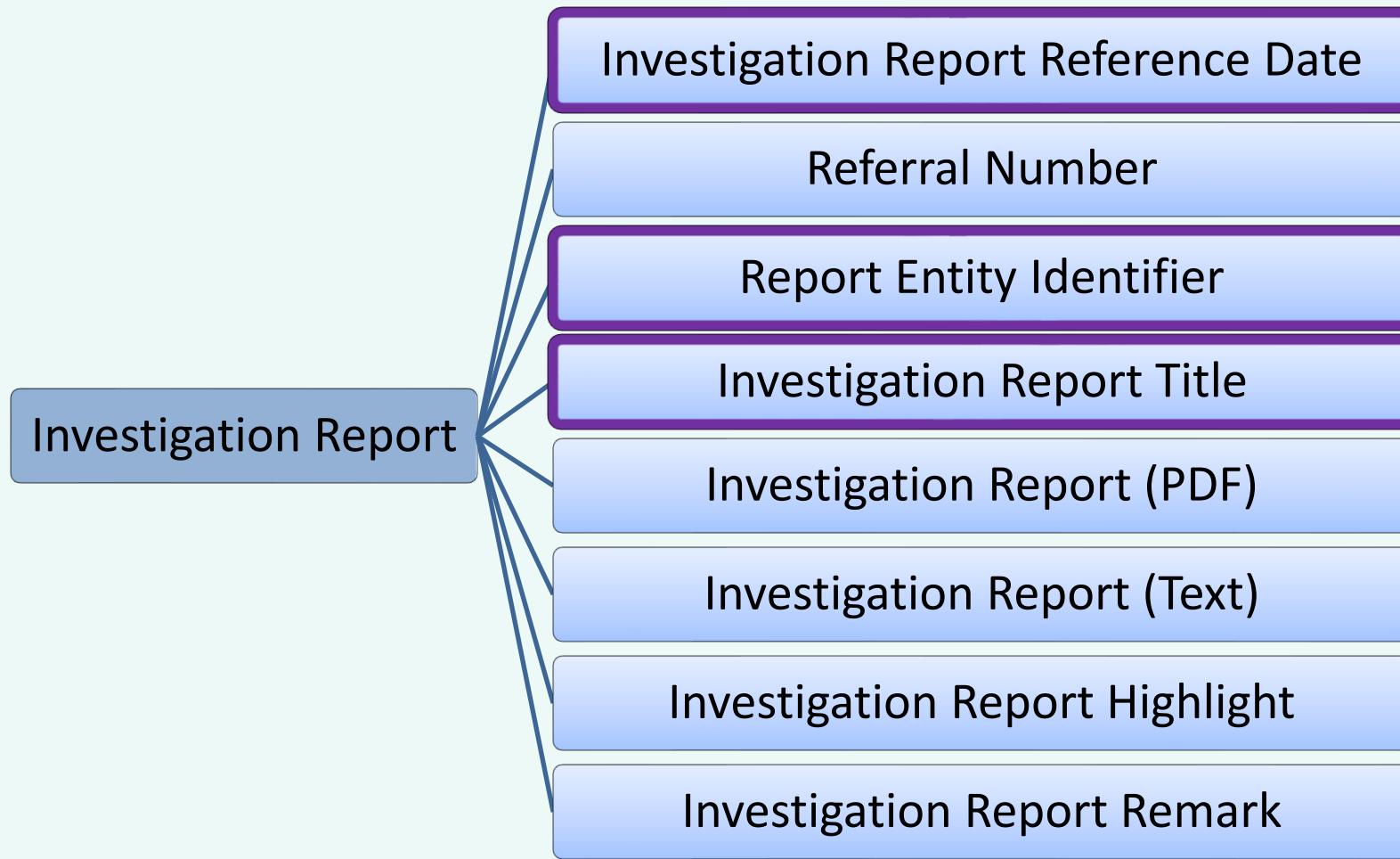
Investigation Report

- Contain information that record / summarize results from other diagnostic tests
- Include the following contents:
 - Examination Date
 - Referral Number
 - Report Title
 - Investigation Report (PDF / Text)
- Level 1 data

Mindmap



Investigation Report



Mandatory – all levels

Investigation Report: Level 1 example

EXAMPLE



Mandatory – all levels

Codex: Investigation Report List

eHR endoscopy report by body system (for eHR Viewer display)

Purpose : To support the grouping and display of the endoscopy reports in eHR viewer according to the body system.

Term ID	eHR Value (= Entity ID)	eHR Description	Body System (for EVE tree display)
9050658	1001754	Endoscopy record	ENT
9050638	100151	Laryngoscopy record	ENT
9050639	100153	Nasopharyngoscopy record	ENT
9050640	100154	Otoscopy record	ENT
9050641	100156	Rhinoscopy record	ENT
9050653	102565	Capsule endoscopy report	GI Tract
9050632	100142	Colonoscopy record	GI Tract
9050629	100139	Duodenoscopy record	GI Tract
9050660	1002558	Endoscopic ultrasound of anal canal report	GI Tract
9050647	100164	Endoscopic ultrasound of colon record	GI Tract
9050644	100161	Endoscopic ultrasound of oesophagus record	GI Tract
9050648	100165	Endoscopic ultrasound of rectum record	GI Tract
9050651	102179	Endoscopic ultrasound of retroperitoneum record	GI Tract
9050650	102101	Endoscopic ultrasound of small intestine record	GI Tract
9050645	100162	Endoscopic ultrasound of stomach record	GI Tract
9050656	1001751	Endoscopic ultrasound record	GI Tract
9050658	1001754	Endoscopy record	GI Tract
9050631	100141	Enteroscopy record	GI Tract
9050628	100138	Oesophagogastroduodenoscopy record	GI Tract
9050630	100140	Oesophagoscopy record	GI Tract
9050631	100141	Enteroscopy record	GI Tract

Related File

- Data scheme & codex
 - Available in eHealth.gov.hk

Level 1 Example

Entity Name	Definition	Code Table	Data requirement (Certified Level 1)	Example (Certified Level 1)
Investigation report reference date	The date when the investigation was performed. If the investigation date is not available, use the report creation date.		M	1/2/2012
Referral number	A unique identifier issued by the healthcare institution who referred the healthcare recipient to the performing / visited institution. This number will be served as a part of the eReferral number for eReferral.		O	20150001
Report entity identifier	The [eHR value] defined in "Investigation report list" codex. A unique identifier issued by eHR ISO for indicating the specific kind of clinical notes / investigation reports sharing to eHRSS. This identifier will be used for facilitating reports searching or filtering in eHR viewer.	Investigation report list	M	100285
Investigation report title	The title of the investigation report		M	Echocardiogram Report
Investigation report (PDF)	Investigation report in Portable Document Format (PDF)		M if [Investigation report (Text)] is blank	
Investigation report (Text)	Investigation report in text format		M if [Investigation report (PDF)] is blank	
Investigation report highlight	Summary of important information for the investigation report, e.g. important findings		O	Cardiac
Investigation report remark	The additional information about the investigation report		O	abc

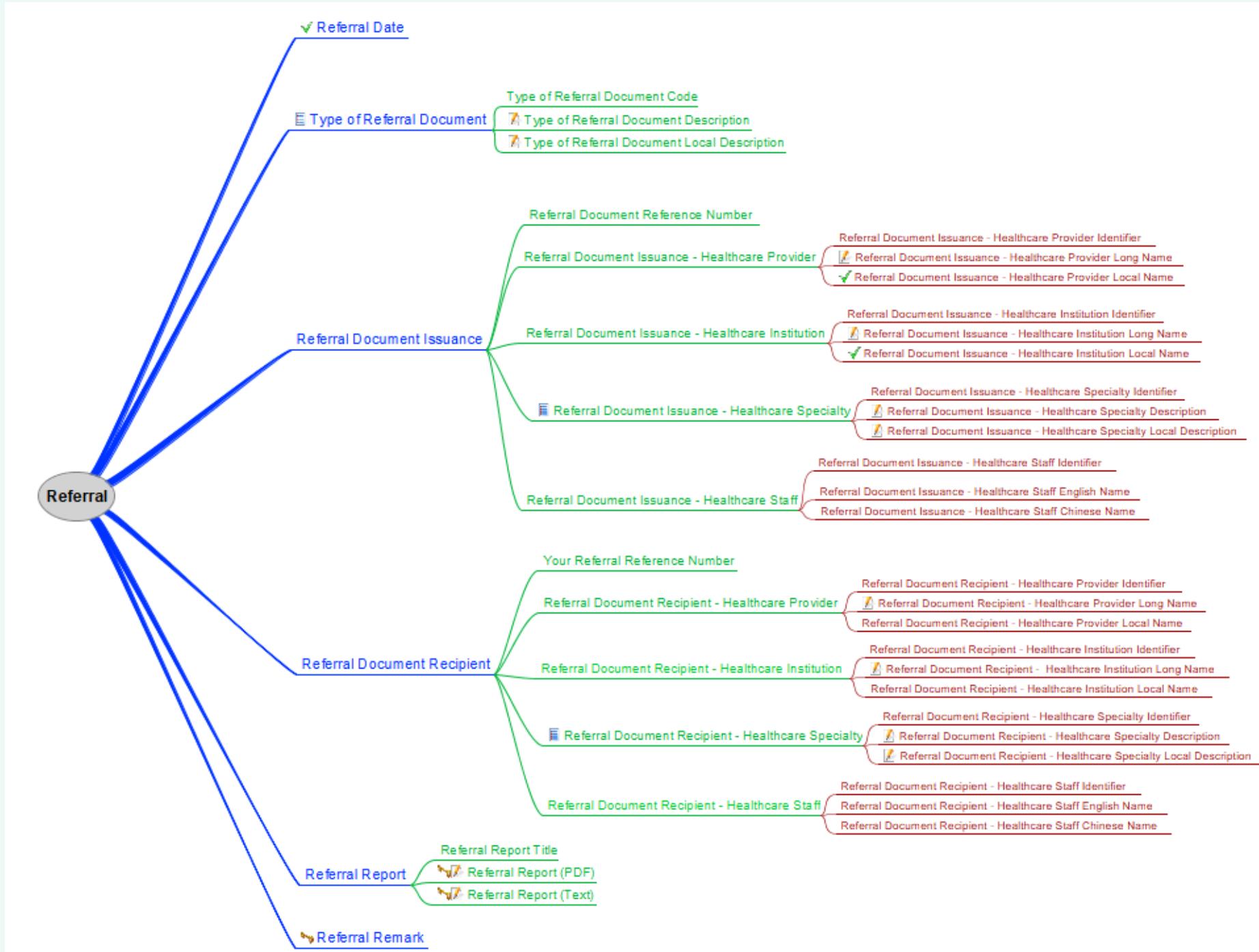
Information Standards Referral

2024.07

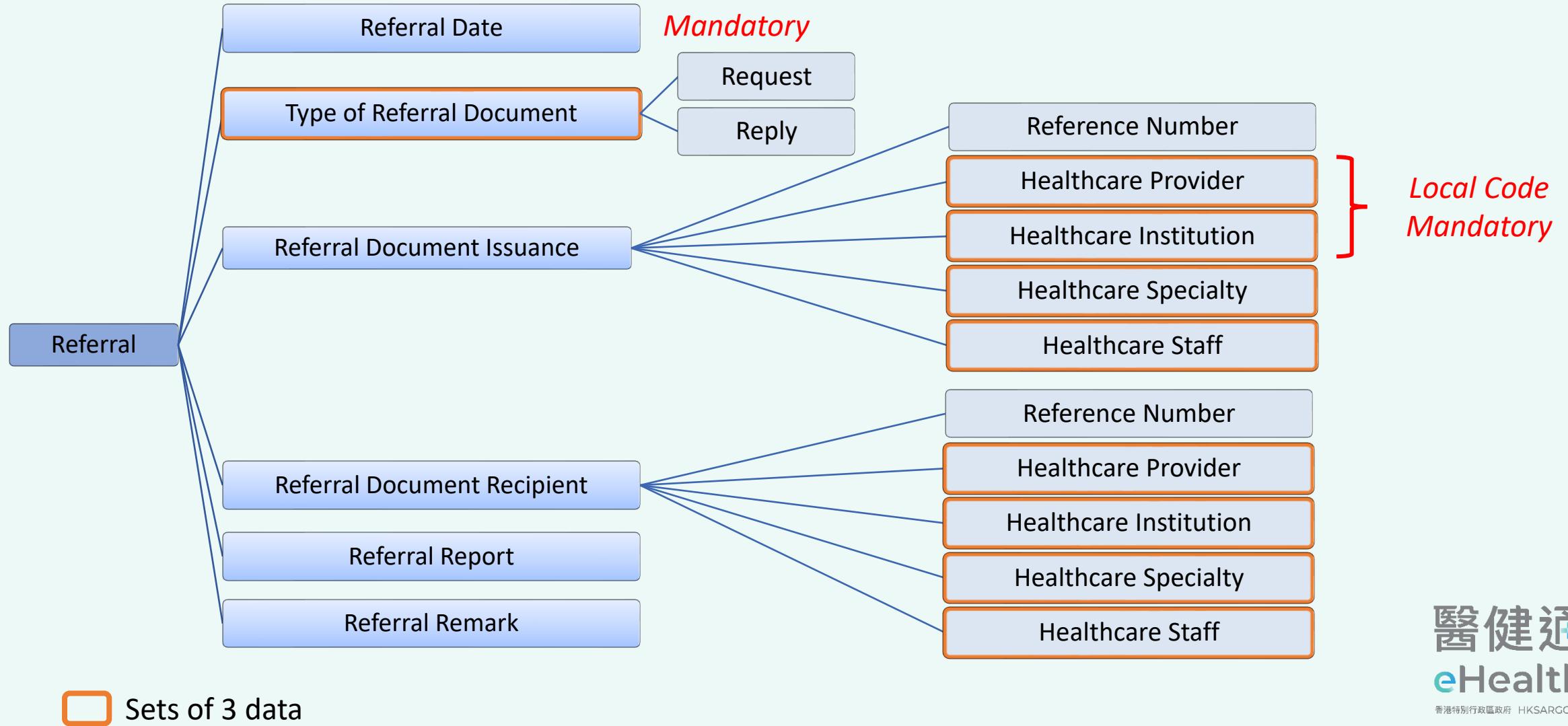
Referral

- Referral documents the information:
 - healthcare providers (referring provider) would refer a patient to other healthcare providers (referred) or
 - reply from the receiving healthcare provider to the referrer
- eHealth will provide features to facilitate referral of a patient between healthcare providers in line with current referral practices

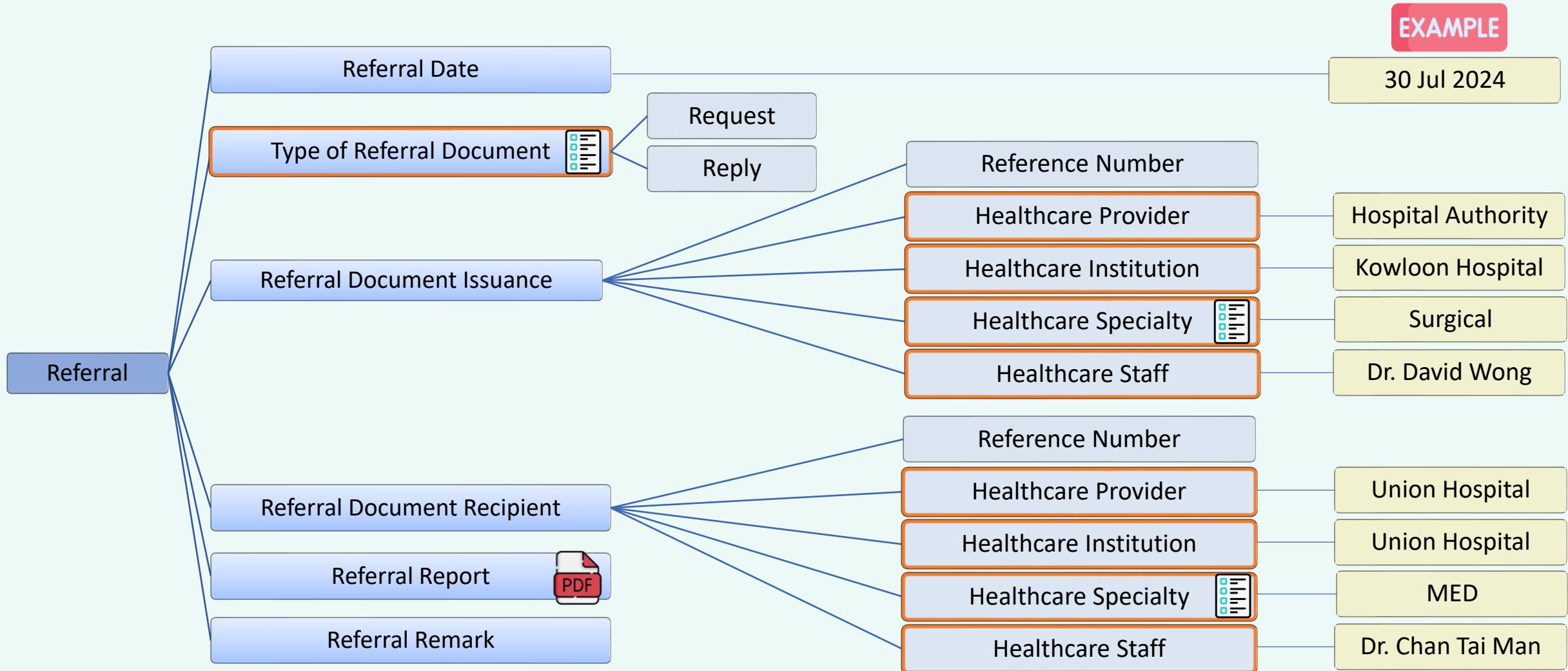
Mindmap



Referral



Referral - Level 1 Example



Sets of 3 data

Codex

Type of referral document

Type of referral document

Purpose: to define the type of referral document

Term ID	eHR Value	eHR Description	Definition
9050377	Request	Request referral	The request referral document is made by a healthcare provider (referring provider) to refer a patient to other healthcare providers such as specialists for ongoing care.
9050374	Reply	Reply referral	The reply document to a request referral is made by the referred healthcare provider.
9050468	Unknown	Unknown type of referral	The type of referral document is not known.

Codex

Specialty

Specialty		
Purpose: to identify a list of specialty in healthcare setting		
Reference: Hong Kong Medical Council & Hospital Authority		
Term ID	eHR Value	eHR Description
9050012	ANA	Anaesthesiology
9050061	CARDIO	Cardiology
9050062	CTS	Cardio-thoracic Surgery
9050078	ONC	Clinical Oncology
9050079	CLIN_PHAR	Clinical Pharmacology and Therapeutics
9050084	COM_MED	Community Medicine
9050093	CRIT_MED	Critical Care Medicine
9050101	DEN	Dental Medicine
9050103	DERMAT	Dermatology & Venereology
9050120	EM	Emergency Medicine
9050121	ENDO_DM	Endocrinology, Diabetes & Metabolism
9050133	FM	Family Medicine
9050146	GI_HEP	Gastroenterology and Hepatology
9050150	SUR	General Surgery
9050152	GER	Geriatric Medicine
9050168	GYN_ONC	Gynaecological Oncology
9050171	HAEMAT	Haematology & Haematological Oncology
9050191	IMMUNO	Immunology & Allergy
9050196	INFECT_D	Infectious Disease
9050199	ICU	Intensive Care
9050201	MED	Internal Medicine
9050258	OBS	Maternal & Fetal Medicine
9050263	MED_ONCO	Medical Oncology
9050287	NEPHRO	Nephrology
9050289	NEUROL	Neurology
9050290	NS	Neurosurgery
9050307	OG	Obstetrics & Gynaecology
9050308	OCCMED	Occupational Medicine

Specialty		
Purpose: to identify a list of specialty in healthcare setting		
Reference: Hong Kong Medical Council & Hospital Authority		
Term ID	eHR Value	eHR Description
9050312	OPH	Ophthalmology
9050315	ORT	Orthopaedics & Traumatology
9050326	ENT	Otorhinolaryngology
9050330	PAESUR	Paediatric Surgery
9050331	PAE	Paediatrics
9050335	PALMED	Palliative Medicine
9050340	PATH	Pathology
9050349	PLASTICS	Plastic Surgery
9050362	PSY	Psychiatry
9050367	RAD	Radiology
9050373	REH	Rehabilitation
9050376	REPMED	Reproductive Medicine
9050380	RESPMED	Respiratory Medicine
9050381	RHEUMA	Rheumatology
9050471	UROGYN	Urogynaecology
9050472	UROL	Urology
9050506	CM	Chinese Medicine
9050025	AUD	Audiology
9050507	CHIRO	Chiropractic
9050080	CLPSY	Clinical Psychology
9050505	DIET	Dietetics
9050264	MSW	Medical Social Work
9050309	OT	Occupational Therapy
9050313	OPT	Optometry
9050316	ORTH	Orthoptics
9050347	PT	Physiotherapy
9050350	POD	Podiatry
9050359	P&O	Prosthetics & Orthotics
9050421	SPTH	Speech Therapy
9050323	OTH	Other specialty

Related File

- Data scheme & codex
 - Available in eHealth.gov.hk

Registered Healthcare Providers

- <https://www.ehealth.gov.hk/>

The screenshot shows the homepage of the eHealth website. At the top, there is a navigation bar with links for "What's eHealth", "You and your family", "Healthcare provider and professional", "What's new", "Contact us", and a "Register Now" button. The main banner features two women in white coats running towards the camera against a backdrop of a modern city skyline. The banner has a green header that reads "Removal Notice of the Electronic Health Record Registration Office". Below the banner, there is a large image of a smartphone displaying the eHealth app interface, which includes icons for appointments, medications, and health management. A tagline "HEALTHY FUTURE IS WITHIN YOUR GRASP" is prominently displayed. Below the banner, there is a search bar with the placeholder text "Search participating healthcare providers". A note below the search bar states: "The service hours of electronic health record registration centres (RC) and healthcare providers (HCP) may have been changed. Please confirm with the RC and HCP before visiting." There are also dropdown menus for "Find clinic, hospital or other healthcare provider", "All provider types", "All districts", and a "Search" button with a magnifying glass icon. A hand cursor is pointing at the "Search" button. At the bottom, there are links for "Look for electronic health record (eHR) registration centres", "District health centres", and "Chinese medicine clinics cum training and research centres". The eHealth logo is in the bottom right corner, along with the text "香港特別行政區政府 HKSARGOV.TW".

eHR viewer

Referral PDF report

The screenshot shows the eHR viewer interface for generating a Referral PDF report. The top navigation bar includes links for Clinical, Administration, and Information, along with user information (DR111 MODEA) and a Logout button. The main content area is titled "eHR Document Viewer". On the left, a "Referral" sidebar lists various patient referrals with a "View PDF" button highlighted. The main document area displays the following content:

VHB2 Hospital - B

Tel 電話: 24567890 Fax 傳真: 24567891

Shop 18A, G/F, One Kowloon, Kowloon Bay, Kowloon

To Whom It May Concern/ Dr. _____

RE: WONG BLACKBERRIES (PN15001)

I would like to refer this patient for your assessment on the following.
WONG BLACKBERRIES attended our clinic on _____ presented with _____

Provisional diagnosis:

Issuance Institution: VHB2 Hospital - B (modeb_dr)
Recipient Institution: VHB2 Hospital - B (modeb_dr)

Done

Internet | Protected Mode: Off

95%

Data schema: Referral

Form	Category 1	Category 2	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)	Example (Medical referring to Surgical)	Example (Surgical reply)	Example (GP refer private laboratory)	Example (HA refer private radiology)
Referral			Referral date	1001773	Date when the referral / reply to the referral was issued	TS	Time stamp					TS	M	1/2/2011	1/3/2011	1/2/2011	1/2/2011
Referral	Type of Referral Document		Type of referral document code	1003361	(eHR value) of the "Type of referral document" code table. Type of referral document is to define whether it is a referral or a reply to a referral.	CE	Coded element			Type of referral document		S	O	Request	Reply	Request	Request
Referral	Type of Referral Document		Type of referral document description	1003362	(eHR description) of the "Type of referral document" code table, it should be the corresponding description of the selected [Type of referral document code]. Type of referral document is to define whether it is a referral or a reply to a referral.	ST	String			Type of referral document		ST	M if [Type of referral document code] is given NA if [Type of referral document code] is blank	Request	Reply referral	Request referral	Request referral
Referral	Type of Referral Document		Type of referral document local description	1003363	Local description created by the healthcare provider for the type of referral document. Type of referral document is to define whether it is a referral or a reply to a referral.	ST	String					ST	M if [Type of referral document code] is given NA if [Type of referral document code] is blank	Referral request	Reply referral	Referral request	Referral request
Referral	Referral Document issuance		Referral document reference number	1003360	A reference number for the referral / reply record issued by the healthcare institution. This number will be served as a part of the eReferral number for e-Referrals.	ST	String					ST	O	125600	ST1234	1234567 (Laboratory test order number)	7654321 (Radiology request number)
Referral	Referral Document issuance - Healthcare Provider identifier		Referral document issuance - healthcare provider identifier	1003463	The healthcare provider who issued the referral / reply record. It is the [HCP identifier] in the eHR Healthcare Provider Index.	ST	String					ST	O	96543212345	9999999999	12345678901	96543212345
Referral	Referral Document issuance - Healthcare Provider long name		Referral document issuance - healthcare provider long name	1003464	The healthcare provider who issued the referral / reply record. It is the [HCP displayed English long name] or the [HCP displayed Chinese long name] in eHR Healthcare Provider Index. It should be the corresponding description of the selected [HCP identifier].	ST	String					ST	M if [Referral document issuance - healthcare provider identifier] is given NA if [Referral document issuance - healthcare provider identifier] is blank	Hospital Authority	Hong Kong Sanatorium & Hospital Limited	XYZ Health Group	Hospital Authority
Referral	Referral Document issuance - Healthcare Provider local name		Referral document issuance - healthcare provider local name	1003465	Local description of the healthcare provider who issued the referral / reply record	ST	String					ST	M	Hospital Authority	Hong Kong San	XYZ Health Group	Hospital Authority
Referral	Referral Document issuance - Healthcare Institution		Referral document issuance - healthcare institution identifier	1003466	The healthcare institution who issued the referral / reply record. It is the [HCI identifier] in the eHR Healthcare Provider Index.	ST	String					ST	O	7356971190		7356971190	
Referral	Referral Document issuance - Healthcare Institution long name		Referral document issuance - issued healthcare institution identifier	1003467	The healthcare institution who issued the referral / reply record. It is the [HCI displayed English long name] or the [HCI displayed Chinese long name] in eHR Healthcare Provider Index. It should be the corresponding description of the selected [HCI identifier].	ST	String					ST	M if [Referral document issuance - healthcare institution identifier] is given NA if [Referral document issuance - healthcare institution identifier] is blank	Kowloon Hospital			Kowloon Hospital
Referral	Referral Document issuance - Healthcare Institution local name		Referral document issuance - healthcare institution local name	1003468	Local description for the healthcare institution who issued the referral / reply record	ST	String					ST	M	Kowloon Hospital	Hong Kong San	The Children Clinic	Kowloon Hospital
Referral	Referral Document issuance - Healthcare Specialty		Referral document issuance - healthcare specialty identifier	1004651	(eHR value) of the "Specialty" code table. It is the healthcare specialty of the healthcare staff who issued the referral / reply record.	CE	Coded element					ST	O	MED	SUR	PAE	MED
Referral	Referral Document issuance - Healthcare Specialty		Referral document issuance - healthcare specialty description	1004652	(eHR description) of the "Specialty" code table. It is the healthcare specialty of the healthcare staff who issued the referral / reply record. It should be the corresponding description of the selected [Referral document issuance - healthcare specialty identifier].	ST	String					ST	M if [Referral document issuance - healthcare specialty identifier] is given NA if [Referral document issuance - healthcare specialty identifier] is blank	Internal Medicine	General Surgery	Paediatrics	Internal Medicine
Referral	Referral Document issuance - Healthcare Specialty local description		Referral document issuance - healthcare specialty local description	1004653	Local description for the healthcare specialty of the healthcare staff who issued the referral / reply record	ST	String					ST	M if [Referral document issuance - healthcare specialty identifier] is given NA if [Referral document issuance - healthcare specialty identifier] is blank	Medical	Surgical	PAED	Medical
Referral	Referral Document issuance - Healthcare Staff		Referral document issuance - healthcare staff identifier	1003469	The healthcare staff who issued the referral / reply record. It is the [HCS identifier] in the eHR Healthcare Staff Index.	ST	String					ST	O	88888	99999	12356	88888
Referral	Referral Document issuance - Healthcare Staff		Referral document issuance - healthcare staff English name	1003470	Full English name (with title, where applicable) of the healthcare staff who issued the referral / reply record.	ST	String					ST	O	Dr. Chan Tai Man	Dr. David Wong	Dr. Leo Chan	Dr. Chan Tai Man
Referral	Referral Document issuance - Healthcare Staff		Referral document issuance - healthcare staff Chinese name	1003471	Full Chinese name (with title, where applicable) of the healthcare staff who issued the referral / reply record.	ST	String					ST	O	陳大文醫生	王大文醫生	陳文醫生	陳大文醫生
Referral	Referral Document Recipient		Your referral reference number	1003472	Your referral reference number is used in replying a referral request. It is the reference number of the referral request issued by the referring healthcare provider.	ST	String	Applicable only if [Type of reference number]				ST	O if [Type of referral document code] = "Reply" NA if [Type of referral document code] <> "Reply"	125600			
Referral	Referral Document Recipient - Healthcare Provider identifier		Referral document recipient - healthcare provider identifier	1003473	The healthcare provider to whom the referral / reply record is sent. It is the [HCP identifier] in the eHR Healthcare Provider Index.	ST	String					ST	O	99999999		99999999	99999999
Referral	Referral Document Recipient - Healthcare Provider long name		Referral document recipient - healthcare provider local name	1003474	The healthcare provider to whom the referral / reply record is sent. It is the [HCP displayed English long name] or the [HCP displayed Chinese long name] in eHR Healthcare Provider Index. It should be the corresponding description of the selected [HCP identifier].	ST	String					ST	M if [Referral document recipient - healthcare provider identifier] is given NA if [Referral document recipient - healthcare provider identifier] is blank	Hong Kong Sanatorium & Hospital Limited		Hong Kong Sanatorium & Hospital Limited	Hong Kong Sanatorium & Hospital Limited
Referral	Referral Document Recipient - Healthcare Provider		Referral document recipient - healthcare provider	1003475	Local description of the healthcare provider to whom the referral / reply record is sent	ST	String					ST	O	HKSHL		HKSHL	HKSHL
Referral	Referral Document Recipient - Healthcare Institution		Referral document recipient - healthcare institution identifier	1003476	The healthcare institution to whom the referral / reply record is sent. It is the [HCI identifier] in the eHR Healthcare Provider Index.	ST	String					ST	O	HKSH		HKSH	HKSH
Referral	Referral Document Recipient - Healthcare Institution long name		Referral document recipient - healthcare institution local name	1003477	The healthcare institution to whom the referral / reply record is sent. It is the [HCI displayed English long name] or the [HCI displayed Chinese long name] in eHR Healthcare Provider Index. It should be the corresponding description of the selected [HCI identifier].	ST	String					ST	M if [Referral document recipient - healthcare institution identifier] is given NA if [Referral document recipient - healthcare institution identifier] is blank	Hong Kong Sanatorium & Hospital		Hong Kong Sanatorium & Hospital	Hong Kong Sanatorium & Hospital
Referral	Referral Document Recipient - Healthcare Institution local name		Referral document recipient - healthcare institution local name	1003478	Local description for the healthcare institution to whom the referral / reply record is sent	ST	String					ST	O	Hong Kong San		Hong Kong San	Hong Kong San
Referral	Referral Document Recipient - Healthcare Specialty		Referral document recipient - healthcare specialty identifier	1004664	(eHR value) of the "Specialty" code table. It is the healthcare specialty of the healthcare staff to whom the referral / reply record is sent.	CE	Coded element					ST	O	SUR	MED	PATH	RAD
Referral	Referral Document Recipient - Healthcare Specialty		Referral document recipient - healthcare specialty description	1004655	(eHR description) of the "Specialty" code table. It is the healthcare specialty of the healthcare staff to whom the referral / reply record is sent. It should be the corresponding description of the selected [Referral document recipient - healthcare specialty identifier].	ST	String					ST	M if [Referral document recipient - healthcare specialty identifier] is given NA if [Referral document recipient - healthcare specialty identifier] is blank	General Surgery	Internal Medicine	Pathology	Radiology
Referral	Referral Document Recipient - Healthcare Specialty		Referral document recipient - healthcare specialty local description	1004666	Local description for the healthcare specialty of the healthcare staff to whom the referral / reply record is sent.	ST	String					ST	M if [Referral document recipient - healthcare specialty identifier] is given NA if [Referral document recipient - healthcare specialty identifier] is blank	Surgical	Medical	Patho	Radiology
Referral	Referral Document Recipient - Healthcare Staff		Referral document recipient - healthcare staff identifier	1003479	The healthcare staff to whom the referral / reply record was sent. It is the [HCS identifier] in the eHR Healthcare Staff Index.	ST	String					ST	O	99999	88888		
Referral	Referral Document Recipient - Healthcare Staff		Referral document recipient - healthcare staff English name	1003480	Full English name (with title, where applicable) of the healthcare staff to whom the referral / reply record is sent.	ST	String					ST	O	Dr. David Wong	Dr. Chan Tai Man		
Referral	Referral Document Recipient - Healthcare Staff		Referral document recipient - healthcare staff Chinese name	1003481	Full Chinese name (with title, where applicable) of the healthcare staff to whom the referral / reply record is sent.	ST	String					ST	O	陳大文醫生	王大文醫生		
Referral	Referral Report		Referral report title	1003364	The title of the referral / reply record	ST	String					ST	O	Surgical Referral	Referral reply	Pathological Referral	MRI Referral
Referral	Referral Report		Referral report (PDF)	1003366	Referral / reply record in Portable Document Format (PDF)	ED	Encapsulated data					ED	M if [Referral report (Text)] is blank				
Referral	Referral Report		Referral report (Text)	1003367	Referral / reply record in text format	TX	Text					TX	M if [Referral report (PDF)] is blank				
Referral	Referral Report		Referral remark	1003368	The additional information about the referral / reply record	TX	Text					TX	O	abc	abc	abc	abc

Data schema: Referral

Entity Name	Code Table	Data requirement (Certified Level 1)	Example (Medical referring to Surgical)	Example (Surgical reply)	Example (GP refer private laboratory)	Example (HA refer private radiology)
Referral date		M	1/2/2011	1/3/2011	1/2/2011	1/2/2011
Type of referral document code	Type of referral document	O	Request	Reply	Request	Request
Type of referral document description	Type of referral document	M if [Type of referral document code] is given NA if [Type of referral document code] is blank	Request	Reply referral	Request referral	Request referral
Type of referral document local description		M if [Type of referral document code] is given NA if [Type of referral document code] is blank	Referral request	Reply referral	Referral request	Referral request
Referral document reference number		O	125600	ST1234	1234567 (Laboratory test order number)	7654321 (Radiology request number)
Referral document issuance - healthcare provider identifier		O	96543212345	9999999999	12345678901	96543212345
Referral document issuance - healthcare provider long name		M if [Referral document issuance - healthcare provider identifier] is given NA if [Referral document issuance - healthcare provider identifier] is blank	Hospital Authority	Hong Kong Sanatorium & Hospital Limited	XYZ Health Group	Hospital Authority
Referral document issuance - healthcare provider local name		M	Hospital Authority	Hong Kong San	XYZ Health Group	Hospital Authority

Data schema: Referral

Entity Name	Code Table	Data requirement (Certified Level 1)	Example (Medical referring to Surgical)	Example (Surgical reply)	Example (GP refer private laboratory)	Example (HA refer private radiology)
Referral document issuance - healthcare institution identifier		O	7356971190			7356971190
Referral document issuance - issued healthcare institution long name		M if [Referral document issuance - healthcare institution identifier] is given NA if [Referral document issuance - healthcare institution identifier] is blank	Kowloon Hospital			Kowloon Hospital
Referral document issuance - healthcare institution local name		M	Kowloon Hospital	Hong Kong San	The Children Clinic	Kowloon Hospital
Referral document issuance - healthcare specialty identifier	Specialty	O	MED	SUR	PAE	MED
Referral document issuance - healthcare specialty description	Specialty	M if [Referral document issuance - healthcare specialty identifier] is given NA if [Referral document issuance - healthcare specialty identifier] is blank	Internal Medicine	General Surgery	Paediatrics	Internal Medicine
Referral document issuance - healthcare specialty local description		M if [Referral document issuance - healthcare specialty identifier] is given NA if [Referral document issuance - healthcare specialty identifier] is blank	Medical	Surgical	PAED	Medical
Referral document issuance - healthcare staff identifier		O	88888	99999	12536	88888
Referral document issuance - healthcare staff English name		O	Dr. Chan Tai Man	Dr. David Wong	Dr. Leo Chan	Dr. Chan Tai Man
Referral document issuance - healthcare staff Chinese name		O	陳大文醫生	王大文醫生	陳文醫生	陳大文醫生

Data schema: Referral

Entity Name	Code Table	Data requirement (Certified Level 1)	Example (Medical referring to Surgical)	Example (Surgical reply)	Example (GP refer private laboratory)	Example (HA refer private radiology)
Your referral reference number		O if [Type of referral document code] = "Reply" NA if [Type of referral document code] <> "Reply"		125600		
Referral document recipient - healthcare provider identifier		O	99999999		99999999	99999999
Referral document recipient - healthcare provider long name		M if [Referral document recipient - healthcare provider identifier] is given NA if [Referral document recipient - healthcare provider identifier] is blank	Hong Kong Sanatorium & Hospital Limited		Hong Kong Sanatorium & Hospital Limited	Hong Kong Sanatorium & Hospital Limited
Referral document recipient - healthcare provider local name		O	HKSHL		HKSHL	HKSHL
Referral document recipient - healthcare institution identifier		O	HKSH		HKSH	HKSH
Referral document recipient - healthcare institution long name		M if [Referral document recipient - healthcare institution identifier] is given NA if [Referral document recipient - healthcare institution identifier] is blank	Hong Kong Sanatorium & Hospital		Hong Kong Sanatorium & Hospital	Hong Kong Sanatorium & Hospital
Referral document recipient - healthcare institution local name		O	Hong Kong San		Hong Kong San	Hong Kong San
Referral document recipient - healthcare specialty identifier	Specialty	O	SUR	MED	PATH	RAD
Referral document recipient - healthcare specialty description	Specialty	M if [Referral document recipient - healthcare specialty identifier] is given NA if [Referral document recipient - healthcare specialty identifier] is blank	General Surgery	Internal Medicine	Pathology	Radiology
Referral document recipient - healthcare specialty local description		M if [Referral document recipient - healthcare specialty identifier] is given NA if [Referral document recipient - healthcare specialty identifier] is blank	Surgical	Medical	Patho	Radiology

Data schema: Referral

Entity Name	Code Table	Data requirement (Certified Level 1)	Example (Medical referring to Surgical)	Example (Surgical reply)	Example (GP refer private laboratory)	Example (HA refer private radiology)
Referral document recipient - healthcare staff identifier		O	99999	88888		
Referral document recipient - healthcare staff English name		O	Dr. David Wong	Dr. Chan Tai Man		
Referral document recipient - healthcare staff Chinese name		O	王大文醫生	陳大文醫生		
Referral report title		O	Surgical Referral	Referral reply	Pathological Referral	MRI Referral
Referral report (PDF)		M if [Referral report (Text)] is blank				
Referral report (Text)		M if [Referral report (PDF)] is blank				
Referral remark		O	abc	abc	abc	abc

Information Standards Medical Certificate

2024.07

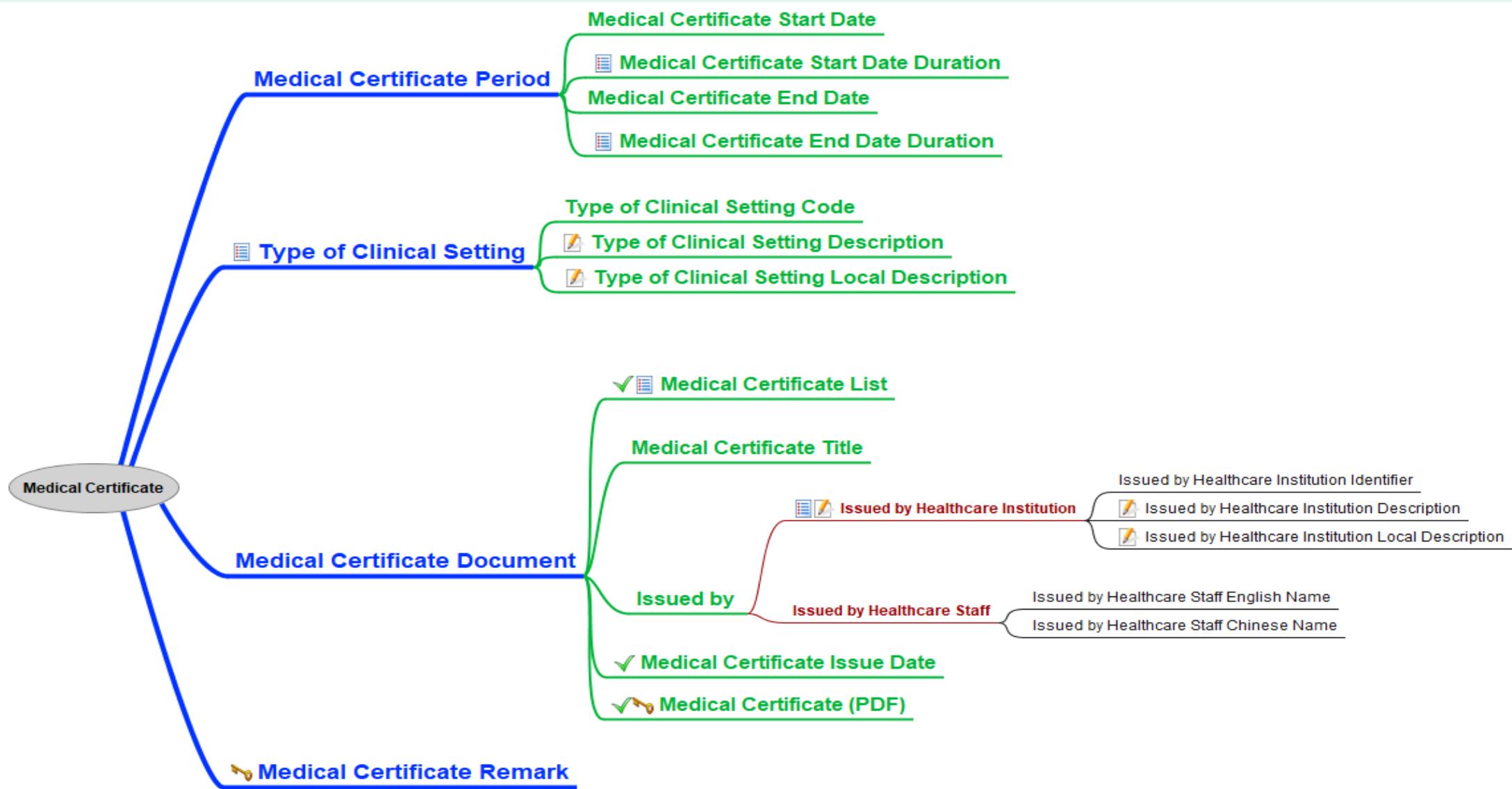
Aim

- To introduce the information standards of eHRSS domain:
 - Medical certificate

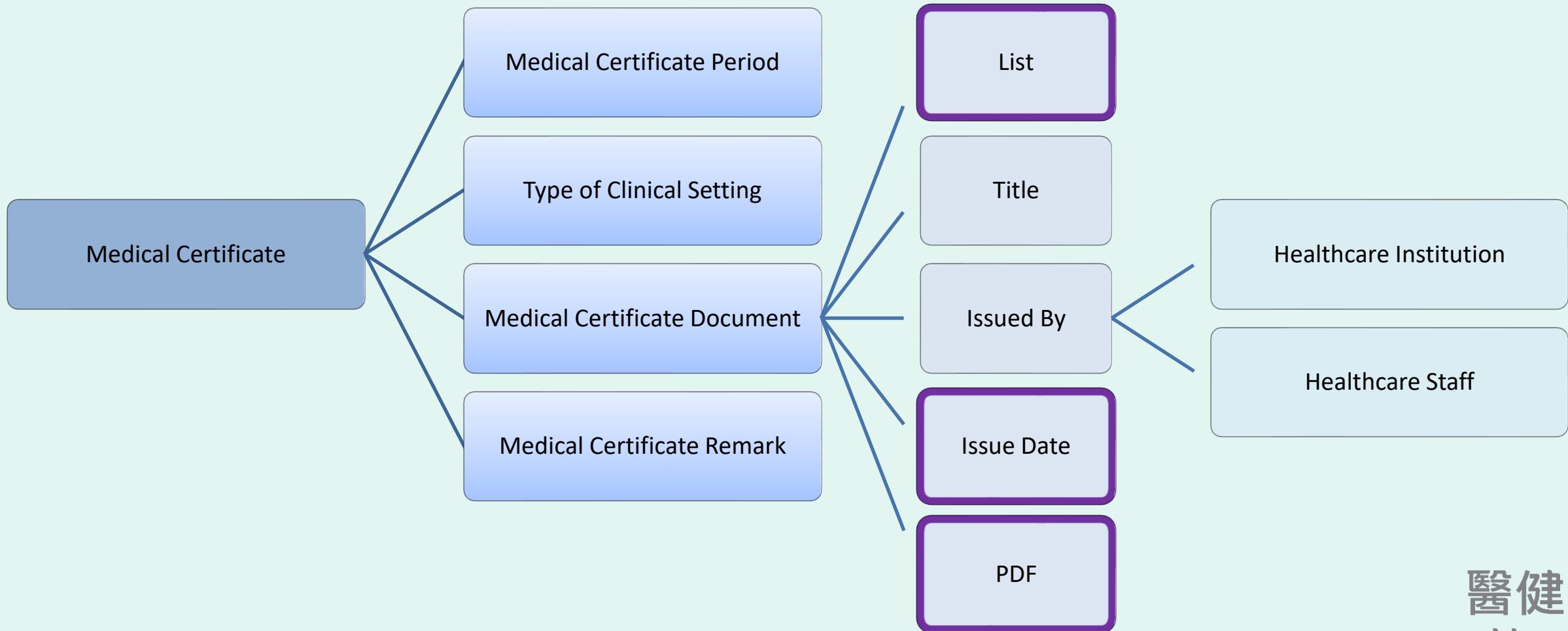
Medical Certificate

- It is a formal statement about the health status or situation related to an individual
- Currently, it includes:
 - Sick Leave Certificate
 - Attendance Certificate
 - Maternity Leave Certificate
- Level 1, 2 & 3 data are accepted

Mindmap



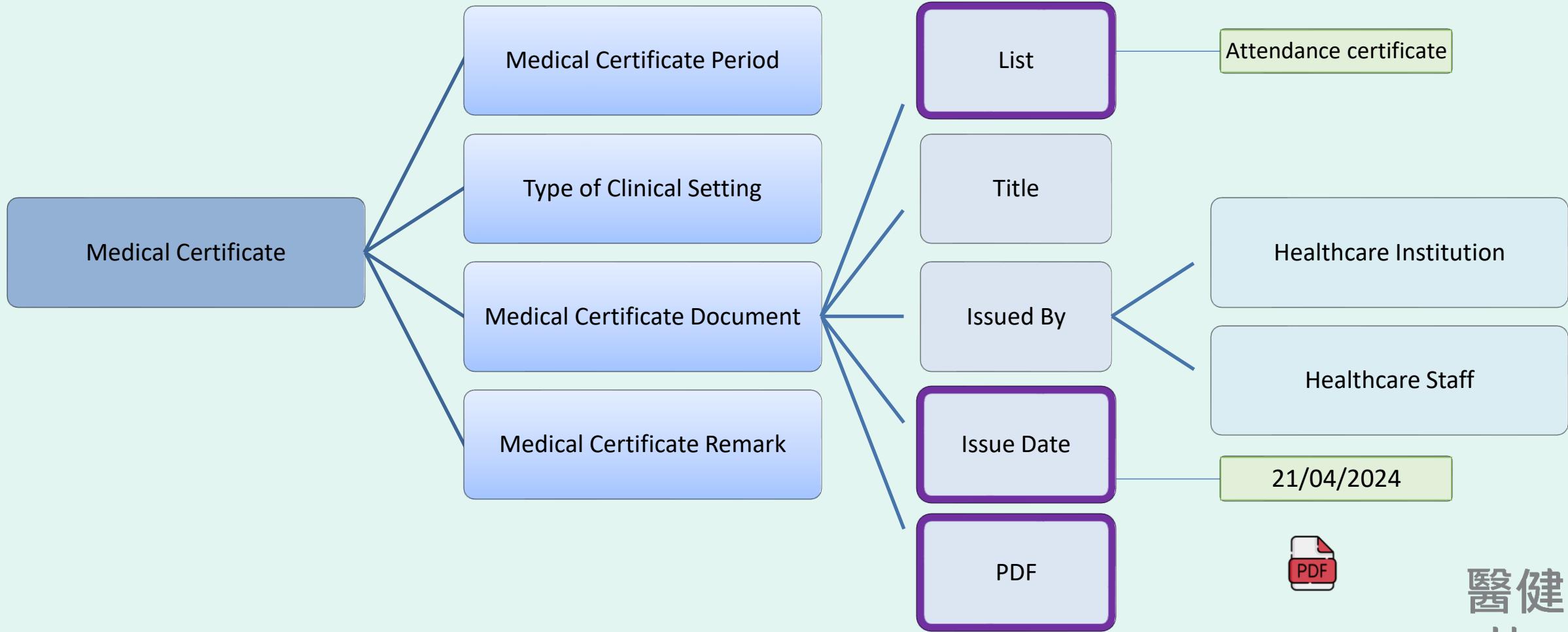
Medical Certificate



Mandatory – all levels

Medical Certificate: Level 1 Example

EXAMPLE

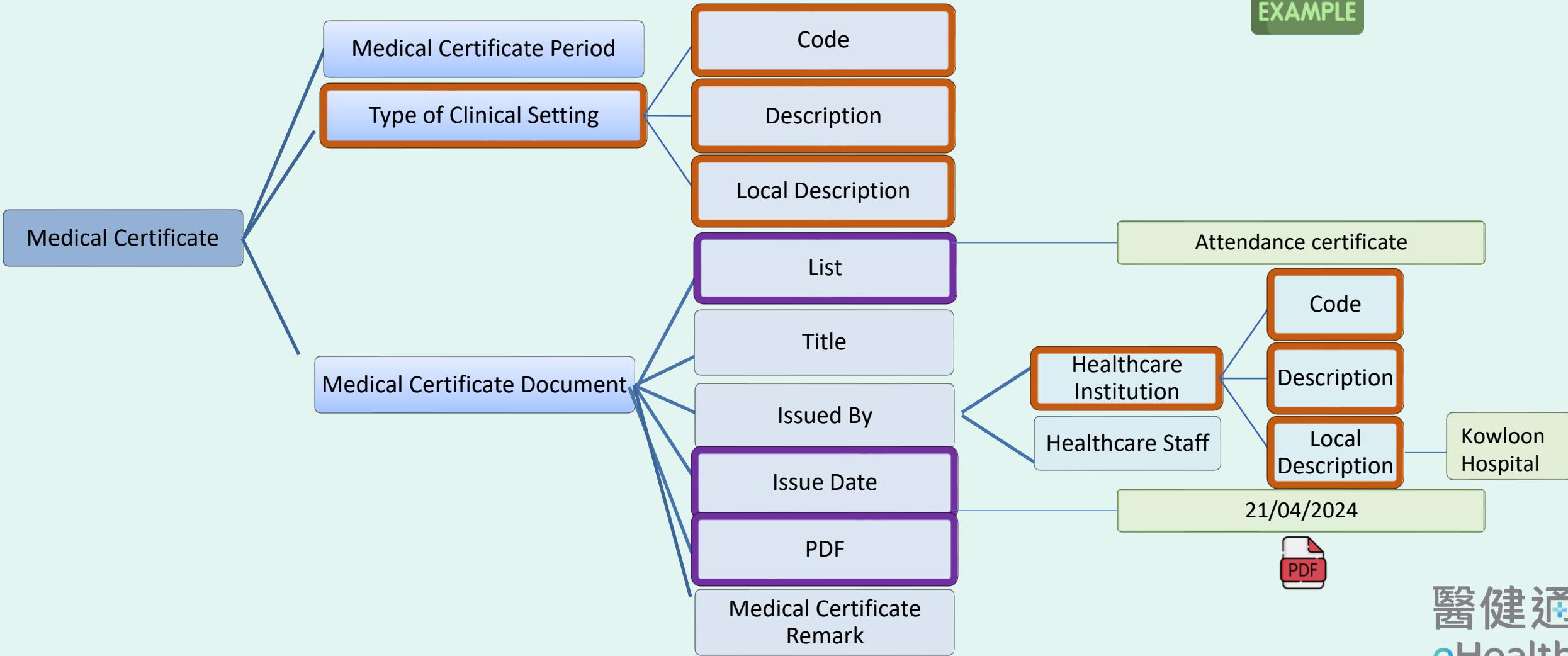


Mandatory – all levels



Medical Certificate: Level 2 Example

EXAMPLE

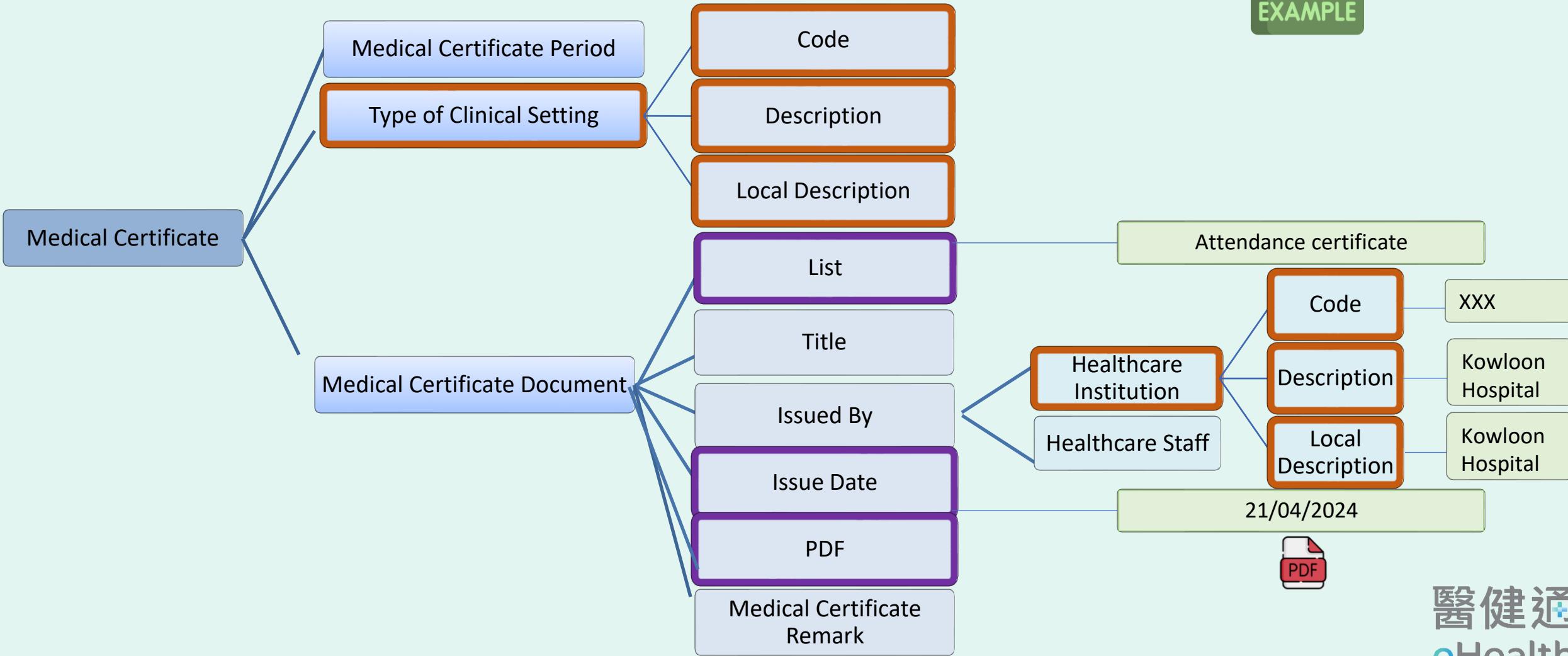


Mandatory – all levels

Sets of 3 data – Level 2: provide any local description

Medical Certificate: Level 3 Example

EXAMPLE



Mandatory – all levels

Sets of 3 data – Level 3: provide 1 set of data

Codex: Type of Clinical Setting

Type of Clinical Setting (Subset: 51)

Purpose : To indicate type of clinical setting

Source : HA ePR

Term ID	eHR Value	eHR Description	Definition
9050002	AE	Accident and emergency record	Record generated during receiving care in Accident and Emergency Department
9050329	OP	Outpatient record	Record generated during out-patient attendance
9050198	IP	Inpatient record	Record generated during inpatient care
9050321	OTH	Other record	Record generated with unidentified healthcare service type is received

Codex: Medical Certificate Start / End Date Duration

Medical Certificate Start / End Date Duration (Subset: 209)

Purpose: to indicate the duration of medical certificate start / end date

Term ID	eHR Value	eHR Description
9050802	AM	Ante Meridiem
9050801	PM	Post Meridiem

Codex: Medical Certificate List

Medical Certificate List (Subset: 210)

Purpose : To list out the records sharing to eHRSS medical certificate domain

Reference: from Information Architecture Management System (IAMS) Entity module

Term ID	eHR Value	eHR Description	eHR Description (Chinese)
9050803	1009030	Sick leave certificate	病假證明書
9050804	1009028	Attendance certificate	應診證明書
9050805	1009096	Maternity leave certificate	產假證明書

Related File

- Data scheme & codex
 - Available in eHealth.gov.hk

THANK YOU

FHIR mapping for Clinical Note / Summary, Investigation report, Referral, Medical Certificate

HL7 HONG KONG – 4TH CONNECTATHON

AUG 5, 2024

What is “Connectathon”?

Connectathon has two very important purposes and one very important principle. A Connectathon is an event that is centered on an open consensus built Interoperability (Connection) specification. The purpose of a Connectathon is both to prove that the specification is complete as well as to prove that implementations written to that specification can ‘connect’. The most important principle of a Connectathon is that it is a safe place for failure in these endeavors. That is that it is free of negative consequences of a mistake in someone’s implementation and that the specification might need to be refined.

Source: <https://healthcaresecprivacy.blogspot.com/2013/11/what-is-connectathon.html>

Our Purpose

EHR

- Consent HL7 interface specification for EHR
- Speed up private data sharing

HL7 HK

- Form a community on HL7 & FHIR in HK to develop healthcare interface standards

Topic

- ◆ Resources
 - DocumentReference

- ◆ Challenge

eHR Level of Compliance

HK eHR	HL7	Data field	Field Content	
			Value	PDF
1	1	institutional (free text) description	institutional (free text) description	Y
2	2	<ul style="list-style-type: none">• institution-defined code• institutional description	institutional description +/- institution-defined code	Y
3.1	3	<ul style="list-style-type: none">• institution-defined code• institutional description• international code (HK)	<ul style="list-style-type: none">• institution-defined code• institutional description• international code (HK)	Y
3.2	3	<ul style="list-style-type: none">• institution-defined code• institutional description• international code (HK)• fully specified	<ul style="list-style-type: none">• institution-defined code• institutional description• international code (HK)	Y

Free text / PDF report only

Structural data (local code)

Structural data
(follow recognized
terminology)

eHR domain level

Data Domain	Level 1	Level 2	Level 3
PMI, Encounter			
Allergy / ADR			
Immunisation			
Medication (Prescription / Dispensing)			
Problem			
Procedure			
Clinical Note / Summary, Investigation report, Referral			 How to embed PDF into FHIR?
Medical Certificate			
Laboratory (General, Microbiology, Pathology)			
Radiology			

FHIR Resources

FHIR Resources Overview					
	Categorized	Alphabetical	R2 Layout	By Maturity	Security Category
Category	Conformance	Terminology	Security	Documents	Other
Foundation	<ul style="list-style-type: none"> CapabilityStatement N StructureDefinition N ImplementationGuide 1 SearchParameter 3 MessageDefinition 1 OperationDefinition N CompartmentDefinition 1 StructureMap 2 GraphDefinition 1 ExampleScenario 0 	<ul style="list-style-type: none"> CodeSystem N ValueSet N ConceptMap 3 NamingSystem 2 TerminologyCapabilities 0 	<ul style="list-style-type: none"> Provenance 3 AuditEvent 3 Consent 2 	<ul style="list-style-type: none"> Composition 2 DocumentManifest 2 DocumentReference 3 CatalogEntry 0 	<ul style="list-style-type: none"> Basic 1 Binary N Bundle N Linkage 0 MessageHeader 4 OperationOutcome N Parameters N Subscription 3 SubscriptionStatus 0 SubscriptionTopic 0
Base	<ul style="list-style-type: none"> Patient N Practitioner 3 PractitionerRole 2 RelatedPerson 2 Person 2 Group 1 	<ul style="list-style-type: none"> Organization 3 OrganizationAffiliation 0 HealthcareService 2 Endpoint 2 Location 3 	<ul style="list-style-type: none"> Substance 2 BiologicallyDerivedProduct 0 Device 2 DeviceMetric 1 NutritionProduct 0 	<ul style="list-style-type: none"> Task 2 Appointment 3 AppointmentResponse 3 Schedule 3 Slot 3 VerificationResult 0 	<ul style="list-style-type: none"> Encounter 2 EpisodeOfCare 2 Flag 1 List 1 Library 3
Clinical	<ul style="list-style-type: none"> AllergyIntolerance 3 AdverseEvent 0 Condition (Problem) 3 Procedure 3 FamilyMemberHistory 2 ClinicalImpression 0 DetectedIssue 1 	<ul style="list-style-type: none"> Observation N Media 1 DiagnosticReport 3 Specimen 2 BodyStructure 1 ImagingStudy 3 QuestionnaireResponse 3 MolecularSequence 1 	<ul style="list-style-type: none"> MedicationRequest 3 MedicationAdministration 2 MedicationDispense 2 MedicationStatement 3 Medication 3 MedicationKnowledge 0 Immunization 3 ImmunizationEvaluation 0 ImmunizationRecommendation 1 	<ul style="list-style-type: none"> CarePlan 2 CareTeam 2 Goal 2 ServiceRequest 2 NutritionOrder 2 VisionPrescription 2 RiskAssessment 1 RequestGroup 2 	<ul style="list-style-type: none"> Communication 2 CommunicationRequest 2 DeviceRequest 1 DeviceUseStatement 0 GuidanceResponse 2 SupplyRequest 1 SupplyDelivery 1

DocumentReference

A reference to a document of any kind for any purpose. Provides metadata about the document so that the document can be discovered and managed. The scope of a document is any serialized object with a mime-type, so includes formal patient centric documents (CDA), clinical notes, scanned paper, and non-patient specific documents like policy text.

2.42.1 Scope and Usage

A DocumentReference resource is used to index a document, clinical note, and other binary objects to make them available to a healthcare system. A document is some sequence of bytes that is identifiable, establishes its own context (e.g., what subject, author, etc. can be displayed to the user), and has defined update management. The DocumentReference resource can be used with any document format that has a recognized mime type and that conforms to this definition.

Typically, DocumentReference resources are used in document indexing systems, such as [IHE XDS ↗](#), such as profiled in [IHE Mobile access to Health Documents ↗](#).

DocumentReference is metadata describing a document such as:

- [CDA ↗](#) documents in FHIR systems
- [FHIR documents](#) stored elsewhere (i.e. registry/repository following the XDS model)
- [PDF documents ↗](#), Scanned Paper, and digital records of faxes
- Clinical Notes in various forms
- Image files (e.g., JPEG, GIF, TIFF)

DocumentReference Structure

Name	Flags	Card.	Type	Description & Constraints
DocumentReference	TU		DomainResource	A reference to a document Elements defined in Ancestors: id, meta, implicitRules, language, text, contained, extension, modifierExtension
masterIdentifier	Σ	0..1	Identifier	Master Version Specific Identifier
identifier	Σ	0..*	Identifier	Other identifiers for the document
status	?!	Σ 1..1	code	current superseded entered-in-error DocumentReferenceStatus (Required)
docStatus	Σ	0..1	code	preliminary final amended entered-in-error CompositionStatus (Required)
type	Σ	0..1	CodeableConcept	Kind of document (LOINC if possible) Document Type Value Set (Preferred)
category	Σ	0..*	CodeableConcept	Categorization of document Document Class Value Set (Example)
subject	Σ	0..1	Reference(Patient Practitioner Group Device)	Who/what is the subject of the document
date	Σ	0..1	instant	When this document reference was created
author	Σ	0..*	Reference(Practitioner PractitionerRole Organization Device Patient RelatedPerson)	Who and/or what authored the document
authenticator	0..1		Reference(Practitioner PractitionerRole Organization)	Who/what authenticated the document
custodian	0..1		Reference(Organization)	Organization which maintains the document
relatesTo	Σ	0..*	BackboneElement	Relationships to other documents
code	Σ	1..1	code	replaces transforms signs appends DocumentRelationshipType (Required)
target	Σ	1..1	Reference(DocumentReference)	Target of the relationship
Security Labels (Expendable)				
content	Σ	1..*	BackboneElement	Document referenced
attachment	Σ	1..1	Attachment	Where to access the document
format	Σ	0..1	Coding	Format/content rules for the document DocumentReference Format Code Set (Preferred)

Attachment datatype

Structure UML XML JSON Turtle R3 Diff All

Structure

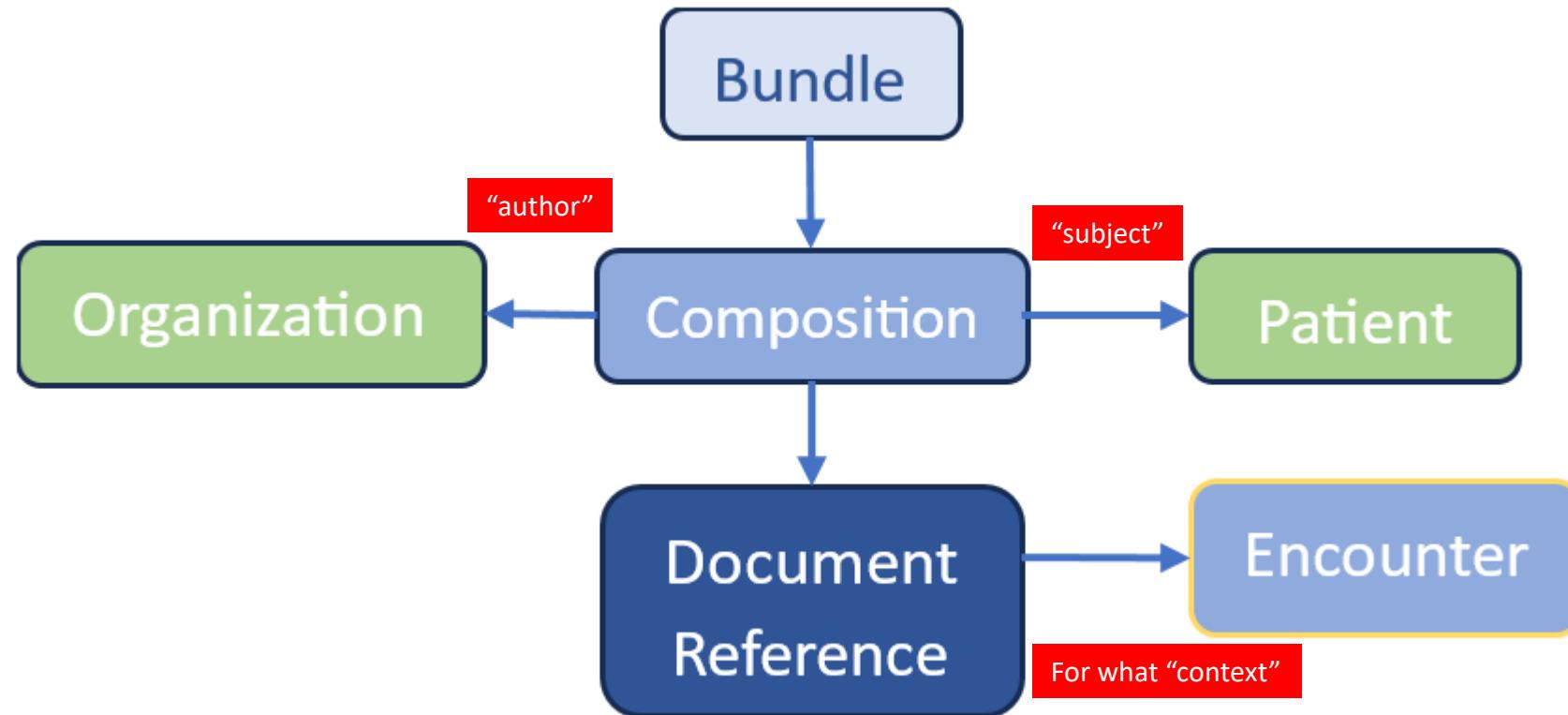
Name	Flags	Card.	Type	Description & Constraints
Attachment	I N		Element	Content in a format defined elsewhere + Rule: If the Attachment has data, it SHALL have a contentType Elements defined in Ancestors: id, extension
contentType	Σ	0..1	code	Mime type of the content, with charset etc. MimeType (Required)
language	Σ	0..1	code	Human language of the content (BCP-47) Common Languages (Preferred but limited to AllLanguages)
data		0..1	base64Binary	Data inline, base64ed
url	Σ	0..1	url	Uri where the data can be found
size	Σ	0..1	unsignedInt	Number of bytes of content (if url provided)
hash	Σ	0..1	base64Binary	Hash of the data (sha-1, base64ed)
title	Σ	0..1	string	Label to display in place of the data
creation	Σ	0..1	dateTime	Date attachment was first created

Documentation for this format

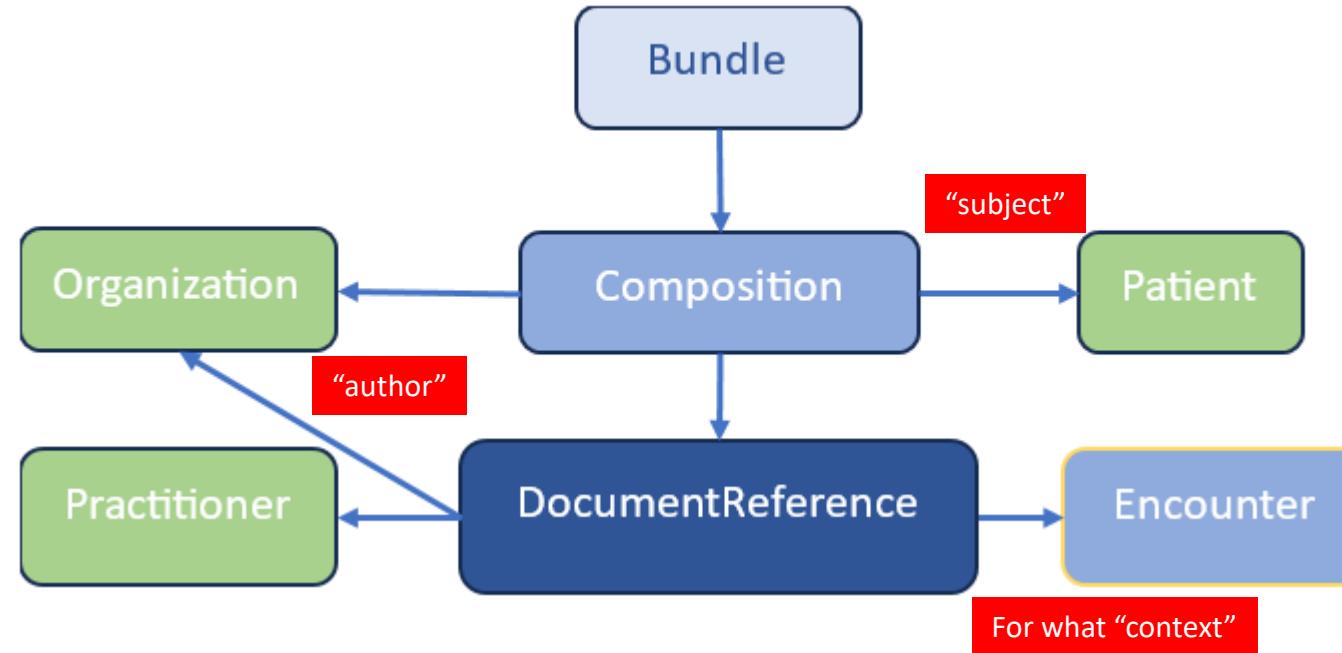
A yellow callout box with the text "application/pdf" is positioned over the "contentType" row, with an arrow pointing to the "data" row.

<http://hl7.org/fhir/R4/datatypes.html#Attachment>

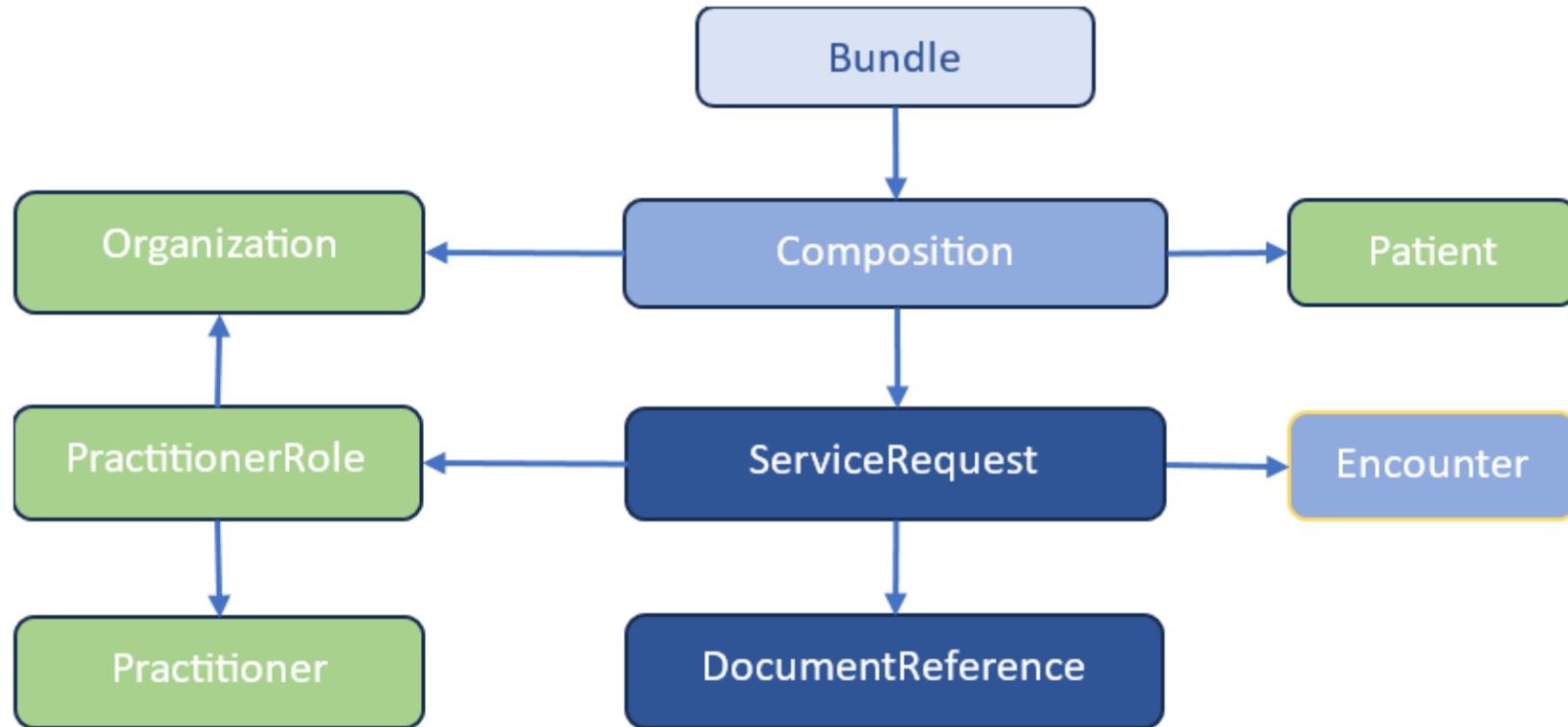
Composition structure for Clinical Note/Summary & Investigation Report



Composition structure for Medical Certificate



Composition structure for Referral



Data Mapping for Clinical Note / Summary



Report Start Date	DocumentReference.identifier
Report End Date	DocumentReference.status
Referral Number	DocumentReference.docStatus
Type of Clinical Setting Code	DocumentReference.type.coding.code
Type of Clinical Setting Description	DocumentReference.category.coding.code
Type of Clinical Setting Local Description	DocumentReference.category.coding.display
Report Entity Identifier	DocumentReference.category.text
Clinical Note /Summary Report Title	DocumentReference.description
Clinical Note /Summary Report Date	DocumentReference.content.attachment.title
Clinical Note /Summary Report (PDF)	DocumentReference.content.attachment.creation
Clinical Note /Summary Report (Text)	DocumentReference.content.attachment.data
Clinical Note /Summary Highlight	?
Clinical Note /Summary Remark	?
	Encounter.period.start
	Encounter.period.end

Data Mapping for Investigation Report



Investigation Report Reference Date	→ DocumentReference.identifier
Referral Number	→ DocumentReference.status
Report Entity Identifier	→ DocumentReference.date
Investigation Report Title	→ DocumentReference.type.coding.code
Investigation Report (PDF)	→ DocumentReference.description
Investigation Report (Text)	→ DocumentReference.content.attachment.title ? → DocumentReference.content.attachment.data
Investigation Report Highlight	?
Investigation Report Remark	?

Data Mapping for Medical Certificate



Medical Certificate Start Date	
Medical Certificate Start Date Duration	?
Medical Certificate End Date	?
Medical Certificate End Date Duration	?
Type of Clinical Setting Code	
Type of Clinical Setting Description	
Type of Clinical Setting Local Description	
Medical Certificate List	
Medical Certificate Title	
Issued by Healthcare Institution identifier	
Issued by Healthcare Institution Description	
Issued by Healthcare Institution Local Description	
Issued by Healthcare Staff English Name	
Issued by Healthcare Staff Chinese Name	?
Medical Certificate (PDF)	
Medical Certificate Remark	?
	DocumentReference.identifier
	DocumentReference.status
	DocumentReference.docStatus
	DocumentReference.type.coding.code
	DocumentReference.category.coding.code
	DocumentReference.category.coding.display
	DocumentReference.category.text
	DocumentReference.description
	DocumentReference.content.attachment.title
	DocumentReference.content.attachment.data
	Organization.identifier
	Organization.name
	Organization.alias
	Practitioner.name.text
	Encounter.period.start
	Encounter.period.end

Point to note

- The size of PDF embedded is limited to 10MB
- Open: request for proposal
 - How to handle if the PDF size is over 10MB?

Challenge

Specifications

- Specifications can be found at
 - <https://github.com/hl7hongkong/HL7-Hong-Kong-FHIR-Connectathon-202408>

The screenshot shows a GitHub repository page for 'hl7hongkong / HL7-Hong-Kong-FHIR-Connectathon-202408'. The repository has 1 branch and 0 tags. A commit by MichaelCheung-FHIR titled 'Update the documents' was made 16 hours ago, containing 2 commits. The commit details are as follows:

File	Description	Time
Part_1_Clinical_Note_Summary	Update the documents	16 hours ago
Part_2_Investigation_Report	Update the documents	16 hours ago
Part_3_Referral	Update the documents	16 hours ago
Part_4_Medical_Certificate	Update the documents	16 hours ago
README.md	Update the documents	16 hours ago

Below the commit list is a 'README' section containing the text: 'Fourth Connectathon of HL7 HK FHIR® Connectathon Series 2023-2024'

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/Qy5xKnspiKFAfs7V6>

Format of the exercise

- Based on the scenario, select the correct answer (multiple choice)

Open Discussion

Closing remarks

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

Connectathon Series 2024

Fourth FHIR Connectathon

Topics: Clinical Note / Summary, Investigation report, Referral, Medical Certificate

- Part 1: Face to face Session (5 Aug 2024)
- Part 2: Online Follow-up Meetings

Zoom Sessions	Time
Aug 9, 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	6 May 2024	Problem, Procedure
4	5 Aug 2024	Clinical Note / Summary, Investigation report, Referral, Medical Certificate
5	Sep – Oct 2024	Laboratory
6	Nov – Dec 2024	PMI, Radiology
7	Jan – Mar 2025	Chinese Medicine

See you soon
