Briefing on eHR Content

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Domains

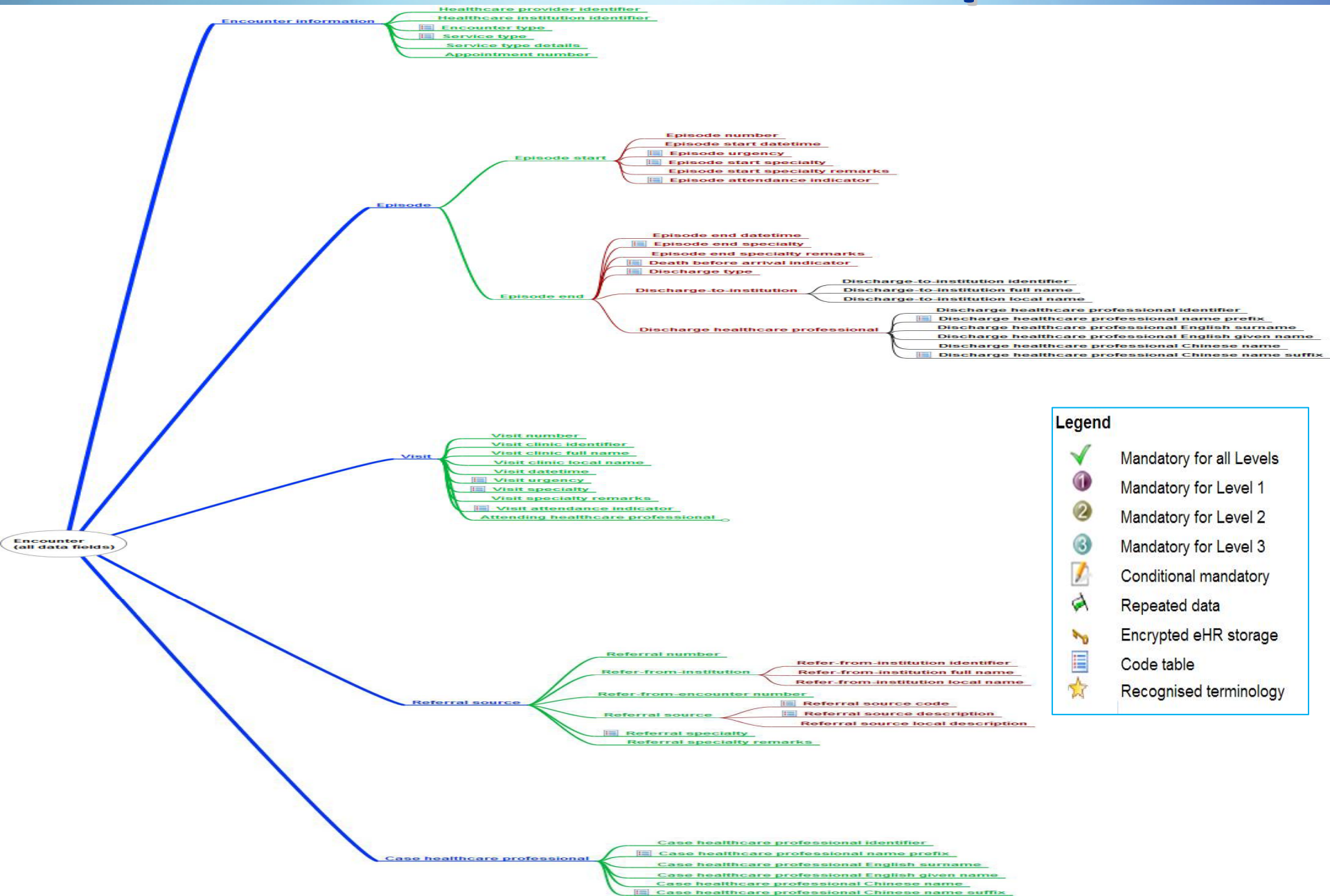
- eHR Participant
- Encounter
- Immunisation

ENCOUNTER

Encounter

- **Encounter data**
  - A list of booked appointments and attended healthcare encounters (face-to-face or electronic contact between a person and the healthcare practitioner who will assess, evaluate and treat a person).
  - An episode is composed of one or more encounter(s).

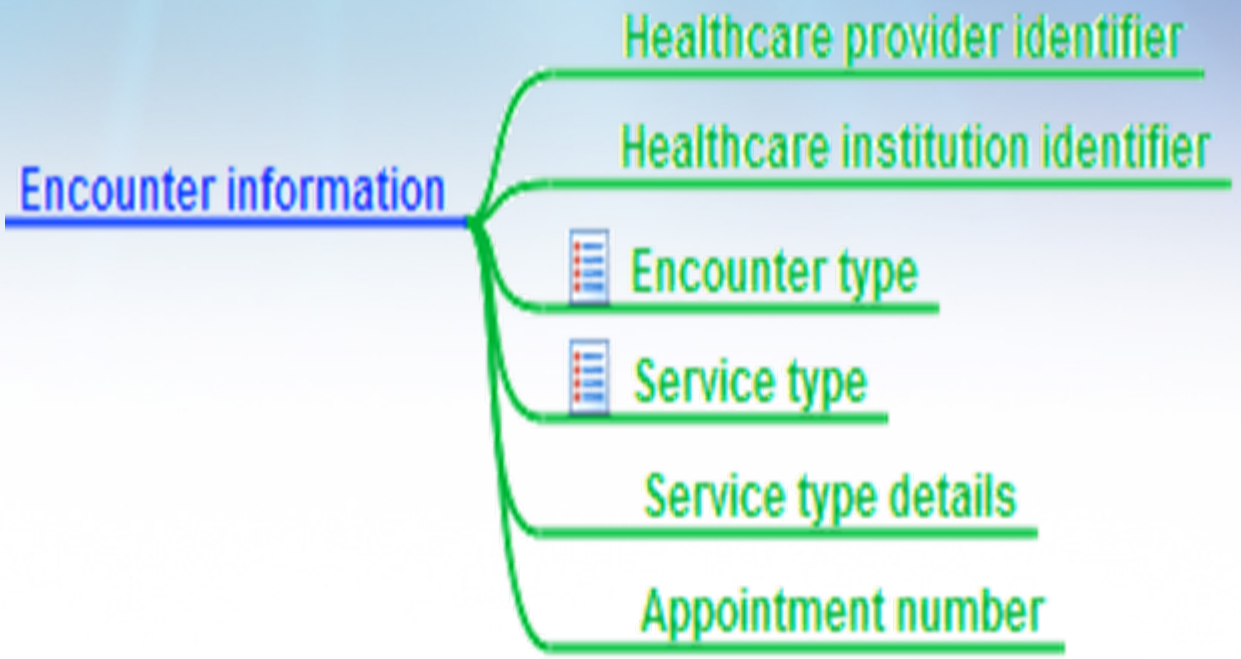
Encounter Mindmap



Encounter Data

Encounter Information

- **Encounter information**
- Episode
  - Episode start
  - Episode end
- Visit
- Referral source
- Case Healthcare Professional



Code Table

Refer to use case for mandatory / conditional mandatory data fields

Episode - Start

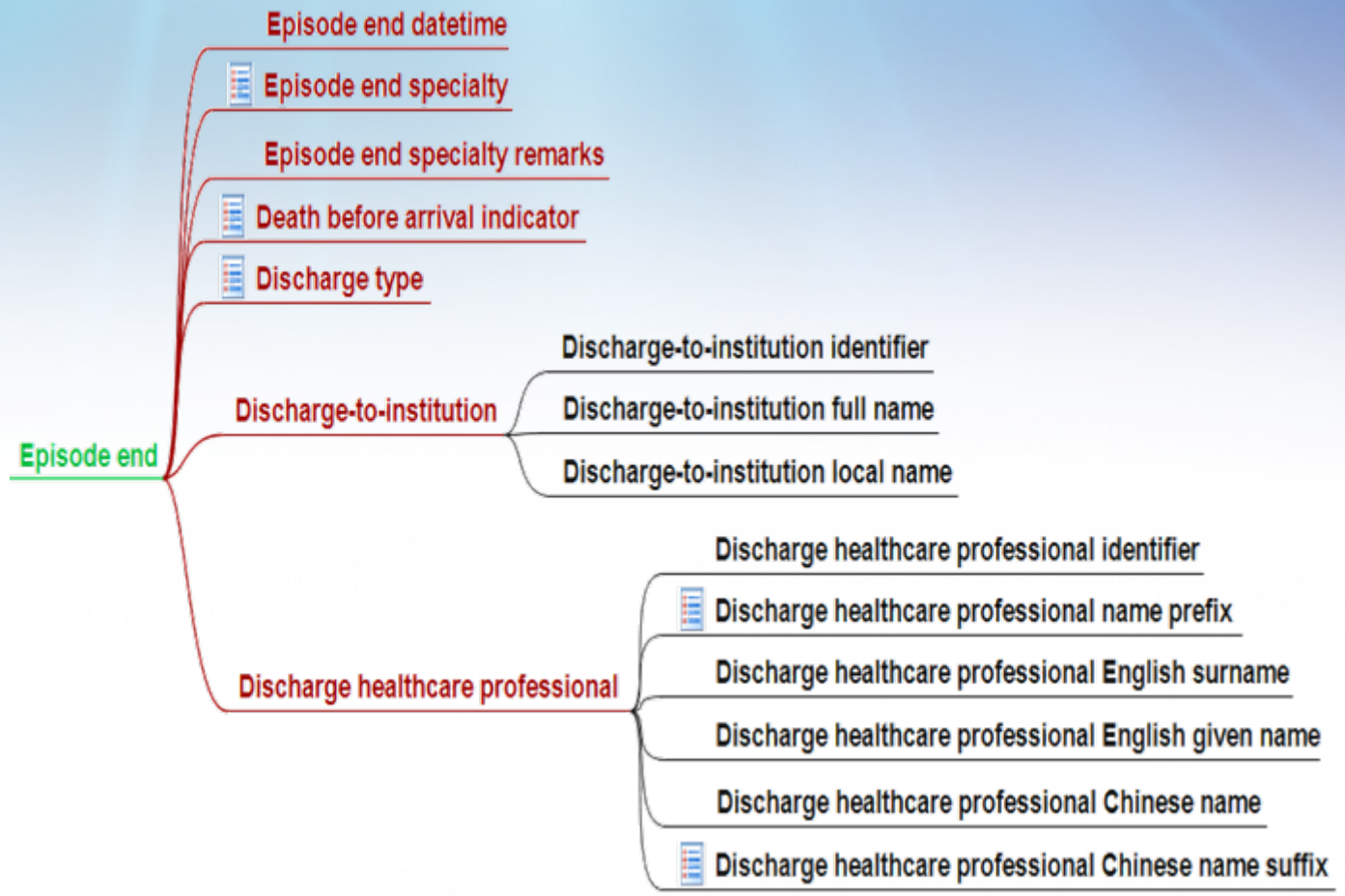
- Encounter information
- Episode
- Episode start
- Episode end
- Visit
- Referral source
- Case Healthcare Professional

Code Table

Refer to use case for mandatory / conditional mandatory data fields

Episode - End

- Encounter information
- **Episode**
  - Episode start
  - Episode end
- Visit
- Referral source
- Case Healthcare Professional



Code Table

Refer to use case for mandatory / conditional mandatory data fields

Visit

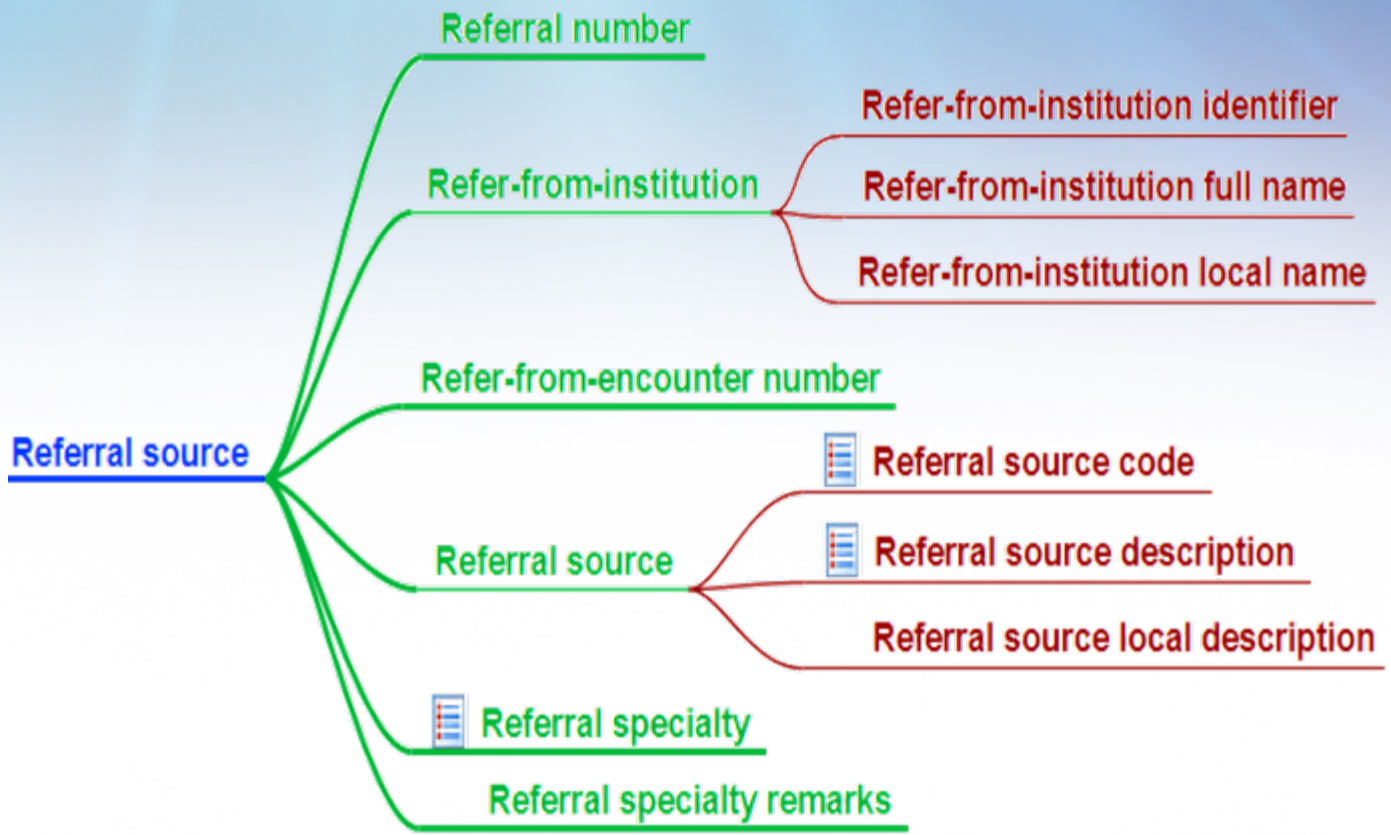
- Encounter information
- Episode
- Episode start
- Episode end
- **Visit**
- Referral source
- Case Healthcare Professional

Code Table

Refer to use case for mandatory / conditional mandatory data fields

Referral source

- Encounter information
- Episode
  - Episode start
  - Episode end
- Visit
- **Referral source**
- Case Healthcare Professional



Code Table

Refer to use case for mandatory / conditional mandatory data fields

Case Healthcare Professional

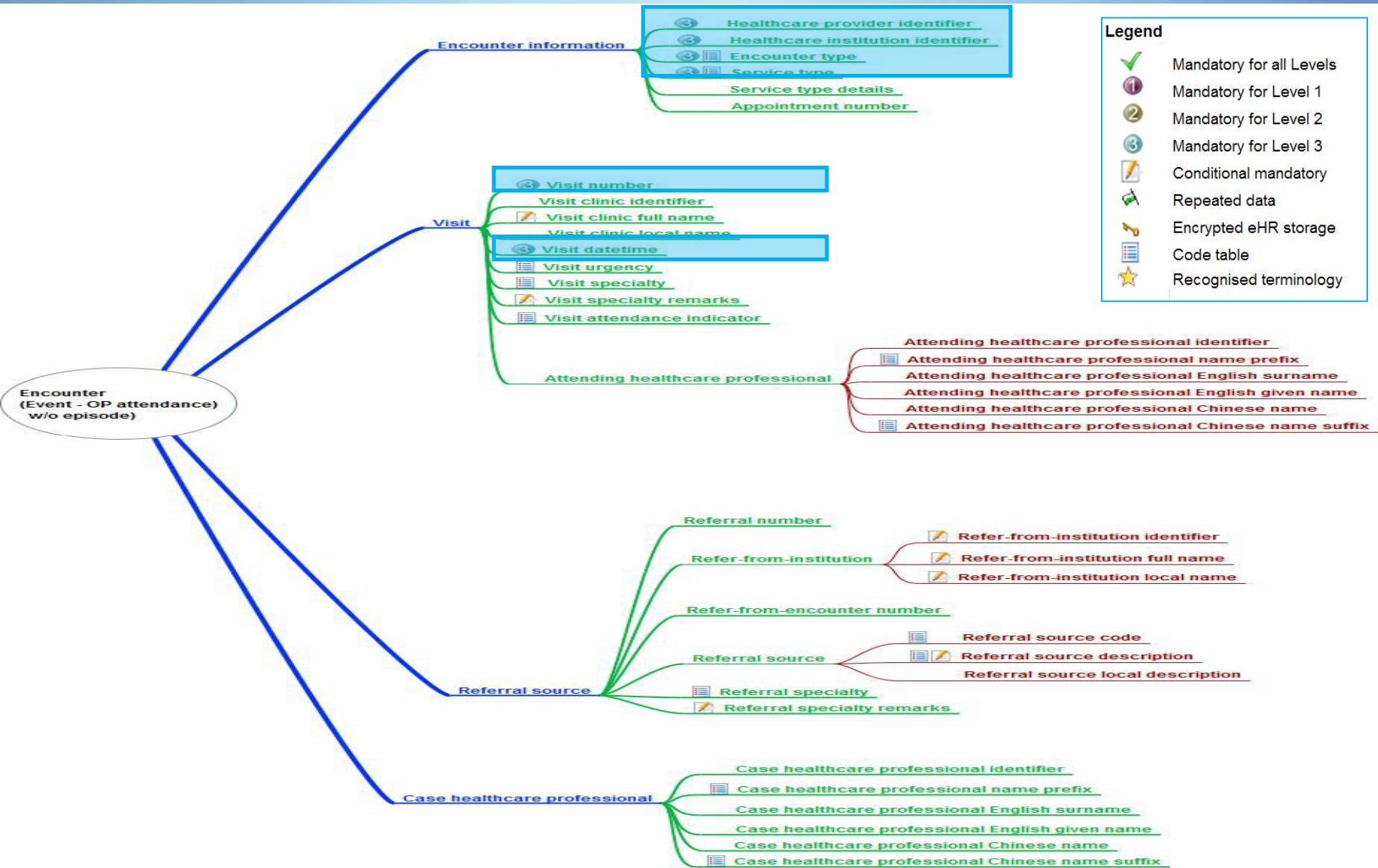
- Encounter information
- Episode
- Episode start
- Episode end
- Visit
- Referral source
- Case Healthcare Professional

Code Table

Refer to use case for mandatory / conditional mandatory data fields

No level 1 & 2 data

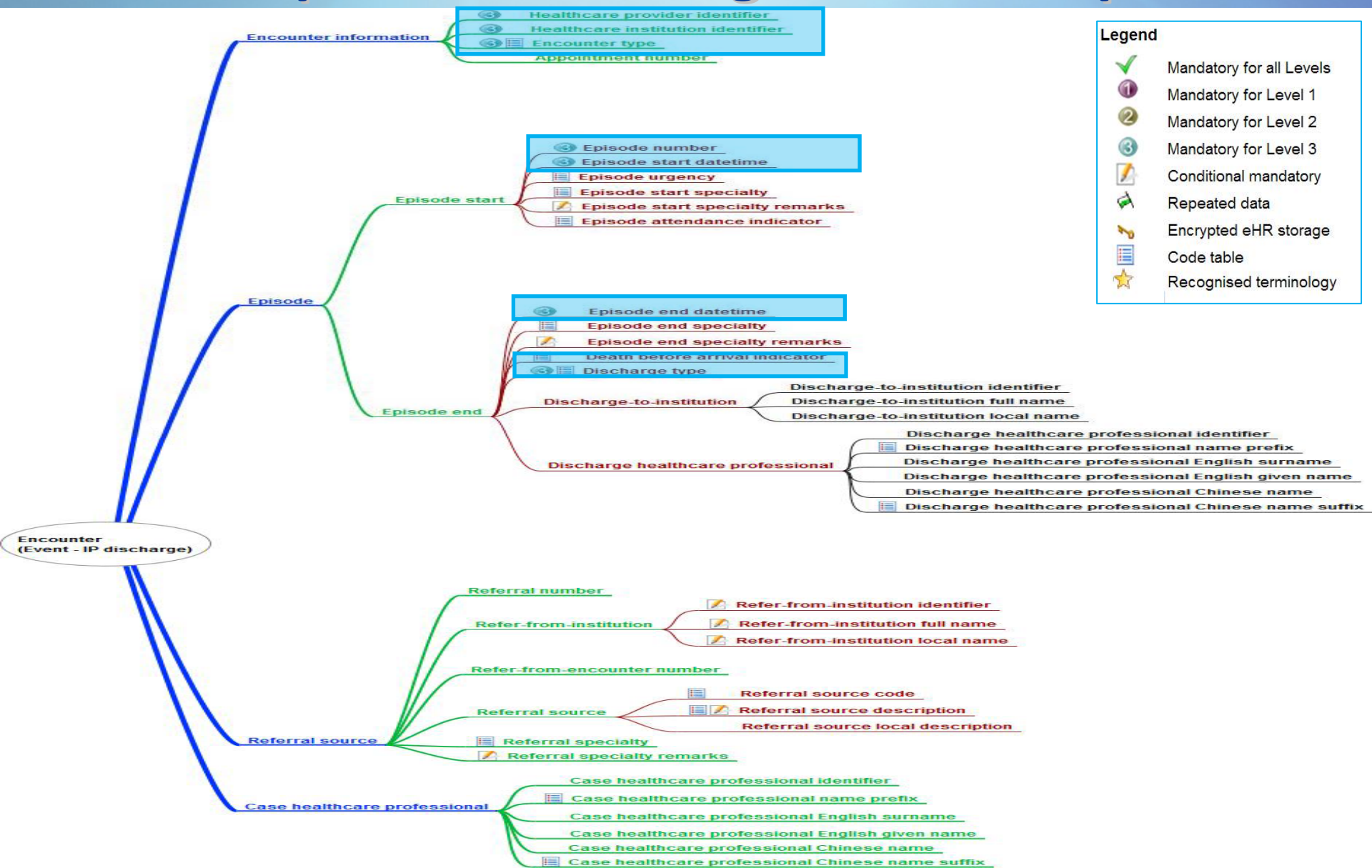
Encounter: Example – Level 3
Outpatient Attendance – mindmap



Encounter: Example – Level 3
Outpatient Attendance – mandatory data

Entity Name	Data Requirement (Certified Level 3)	Example (Certified Level 3)
Healthcare provider identifier	M	54321 12300
Healthcare institution identifier	M	54321 12345
Encounter type	M	Outpatient
Service type	M	Specialist outpatient consultation
Visit number	M	22222
Visit datetime	M	25 Sep 2011 10:20:15

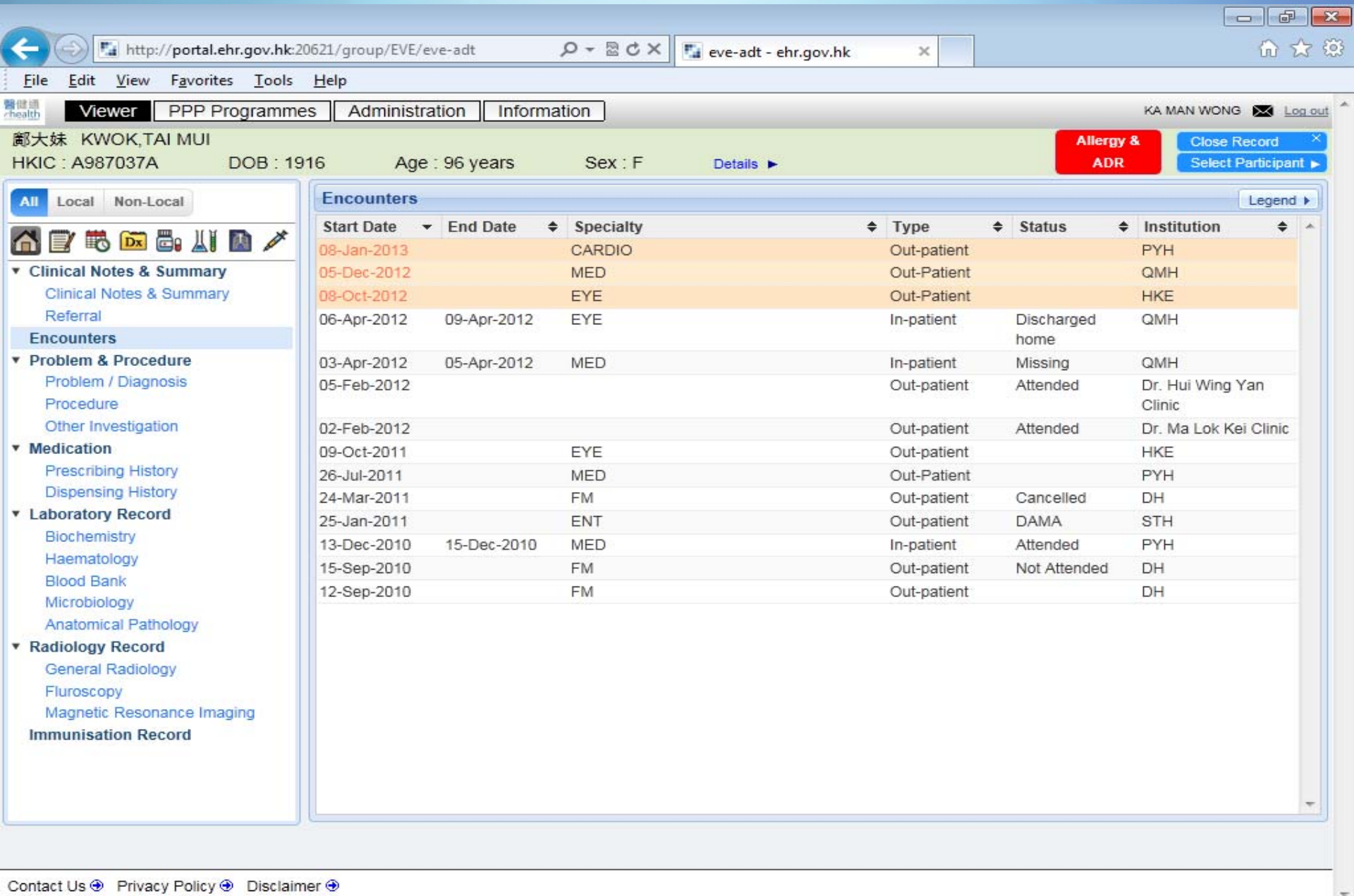
Encounter: Example – Level 3
Inpatient Discharge – mindmap



Encounter: Example – Level 3
Inpatient Discharge – mandatory data

Entity Name	Data Requirement (Certified Level 3)	Example (Certified Level 3)
Healthcare provider identifier	M	12345 67890
Healthcare institution identifier	M	12345 67891
Encounter type	M	Inpatient
Episode number	M	223344
Episode start datetime	M	10 Oct 2011 10:10:10
Episode end datetime	M	25 Oct 2011 10:10:30
Discharge type	M	Home

eHR viewer – Screen layout



Related Files

- Data schema
  - Encounter
- Codex
  - Encounter type
  - Service type
  - Urgency
  - Specialty
  - Attendance indicator
  - Yes No
  - Discharge type
  - Referral source
  - Healthcare professional name English name prefix
  - Healthcare professional Chinese name suffix

Encounter – data schema (1/3)

eHR Sharable Data - Encounter

Form	Entity Name	Entity ID	Definition	Data Type (Code)	Data Type (description)	Validation rule	Repeated Data	Code Table	Data requirement (Certified Level 3)	Example (Certified Level 3)
Encounter	Healthcare provider identifier		eHR identifier of the healthcare provider whose healthcare institution created the encounter	CE	Coded Element				Refer to use case	Refer to use case
Encounter	Healthcare institution identifier		eHR identifier of the healthcare institution who created the encounter	CE	Coded Element				Refer to use case	Refer to use case
Encounter	Encounter type		The type of the encounter received / to be received by the eHR Participant	CE	Coded Element			Encounter type	Refer to use case	Refer to use case
Encounter	Service type		The type of outpatient service received / to be received by the eHR Participant	CE	Coded Element			Service Type	Refer to use case	Refer to use case
Encounter	Service type details		Details on the outpatient service type received / to be received by the eHR Participant	TX	Text				Refer to use case	Refer to use case
Encounter	Appointment number		A unique reference number assigned by the healthcare institution to an appointment	TX	Text				Refer to use case	Refer to use case
Encounter	Episode number		A unique reference number assigned by the healthcare institution to an episode of care. The episode of care can be of inpatient or	ST	String				Refer to use case	Refer to use case
Encounter	Episode start datetime		The date and time when the episode of care is started. If it is a future date or time, it represents a scheduled inpatient admission	TS	Time stamp				Refer to use case	Refer to use case
Encounter	Episode urgency		Urgency of the care when the episode is started	CE	Coded Element			Urgency	Refer to use case	Refer to use case
Encounter	Episode start specialty		Specialty of the eHR participant upon episode creation	CE	Coded Element			Specialty	Refer to use case	Refer to use case
Encounter	Episode start specialty remarks		Details on specialty of the eHR participant upon episode creation	ST	String				Refer to use case	Refer to use case
Encounter	Episode attendance indicator		An indicator indicating whether the episode has been attended in relation to inpatient or emergency service	CE	Coded Element			Attendance indicator	Refer to use case	Refer to use case
Encounter	Episode end datetime		The date and time when the episode of care is ended	TS	Time stamp				Refer to use case	Refer to use case
Encounter	Episode end specialty		Specialty of the eHR participant upon episode end	CE	Coded Element			Specialty	Refer to use case	Refer to use case
Encounter	Episode end specialty remarks		Details on specialty of the eHR participant upon episode end	ST	String				Refer to use case	Refer to use case
Encounter	Death before arrival indicator		An indicator indicating the eHR Participant was dead before arrival to the healthcare institution	CE	Coded Element			Yes No	Refer to use case	Refer to use case
Encounter	Discharge type		Type of discharge of the eHR Participant from the healthcare institution	CE	Coded Element			Discharge type	Refer to use case	Refer to use case
Encounter	Discharge-to-institution identifier		eHR identifier of the healthcare institution where the eHR Participant was discharged to	CE	Coded Element				Refer to use case	Refer to use case
Encounter	Discharge-to-institution full name		eHR description of the healthcare institution where eHR Participant was discharged to	ST	String				Refer to use case	Refer to use case
Encounter	Discharge-to-institution local name		Local description of the healthcare institution where the eHR Participant was discharged to	ST	String				Refer to use case	Refer to use case
Encounter	Discharge healthcare professional identifier		eHR identifier of the healthcare professional who discharged the patient	CE	Coded Element				Refer to use case	Refer to use case
Encounter	Discharge healthcare professional name prefix		English name prefix of the healthcare professional who discharged the episode	ST	String				Refer to use case	Refer to use case
Encounter	Discharge healthcare professional English surname		English surname of the healthcare professional who discharged the episode	ST	String				Refer to use case	Refer to use case

Encounter – data schema (2/3)

Form	Entity Name	Entity ID	Definition	Data Type (Code)	Data Type (description)	Validation rule	Repeated Data	Code Table	Data requirement (Certified Level 3)	Example (Certified Level 3)
Encounter	Discharge healthcare professional English given name		English given of the healthcare professional who discharged the episode	ST	String				Refer to use case	Refer to use case
Encounter	Discharge healthcare professional Chinese name		Chinese name of the healthcare professional who discharged the episode	ST	String				Refer to use case	Refer to use case
Encounter	Discharge healthcare professional Chinese name suffix		Chinese name suffix of the healthcare professional who discharged the episode	ST	String				Refer to use case	Refer to use case
Encounter	Visit number		A unique reference number assigned by the healthcare institution to a particular visit where the eHR Participant received / is to receive	ST	String				Refer to use case	Refer to use case
Encounter	Visit clinic identifier		eHR identifier of the clinic where the eHR Participant received / is to received outpatient services	CE	Coded Element				Refer to use case	Refer to use case
Encounter	Visit clinic full name		eHR description of the clinic where the eHR Participant received / is to received outpatient services	ST	String				Refer to use case	Refer to use case
Encounter	Visit clinic local name		Local description of the clinic where the eHR Participant received / is to received outpatient services	ST	String				Refer to use case	Refer to use case
Encounter	Visit datetime		The date and time of the visit. If it is a future date or time, it represents an outpatient appointment.	TS	Time stamp				Refer to use case	Refer to use case
Encounter	Visit urgency		Urgency of the care of the visit	CE	Coded Element			Urgency	Refer to use case	Refer to use case
Encounter	Visit specialty		Specialty of the eHR Participant for the visit	CE	Coded Element			Specialty	Refer to use case	Refer to use case
Encounter	Visit specialty remarks		Details on specialty of the eHR Participant for the visit	ST	String				Refer to use case	Refer to use case
Encounter	Visit attendance indicator		An indicator indicating whether the visit has been attended	CE	Coded Element			Attendance indicator	Refer to use case	Refer to use case
Encounter	Attending healthcare professional identifier		eHR identifier of the healthcare professional who attended the visit	CE	Coded Element				Refer to use case	Refer to use case
Encounter	Attending healthcare professional name prefix		English name prefix of the healthcare professional who attended the visit	ST	String				Refer to use case	Refer to use case
Encounter	Attending healthcare professional English surname		English surname of the healthcare professional who attended the visit	ST	String				Refer to use case	Refer to use case
Encounter	Attending healthcare professional English given name		English given of the healthcare [professional who attended the visit	ST	String				Refer to use case	Refer to use case
Encounter	Attending healthcare professional Chinese name		Chinese name of the healthcare professional who attended the visit	ST	String				Refer to use case	Refer to use case
Encounter	Attending healthcare professional Chinese name suffix		Chinese name suffix of the healthcare professional who attended the visit	ST	String				Refer to use case	Refer to use case
Encounter	Referral number		A reference number issued by the healthcare provider for the referral	ST	String				Refer to use case	Refer to use case
Encounter	Refer-from-institution identifier		eHR identifier of the healthcare institution where the eHR Participant was referred from	CE	Coded Element				Refer to use case	Refer to use case
Encounter	Refer-from-institution full name		eHR description of the healthcare institution where the eHR Participant was referred from.	ST	String				Refer to use case	Refer to use case
Encounter	Refer-from-institution local name		Local description of the healthcare institution where the eHR Participant was referred from	ST	String				Refer to use case	Refer to use case

Encounter – data schema (3/3)

Form	Entity Name	Entity ID	Definition	Data Type (Code)	Data Type (description)	Validation rule	Repeated Data	Code Table	Data requirement (Certified Level 3)	Example (Certified Level 3)
Encounter	Refer-from-encounter number		A unique reference number assigned by the healthcare institution, e.g. episode number or visit number, to a particular episode / visit	ST	String				Refer to use case	Refer to use case
Encounter	Referral source code		eHR value of the 'Referral source' code table, to define the referral source for the current episode / visit	CE	Coded Element			Referral source	Refer to use case	Refer to use case
Encounter	Referral source description		eHR description of the 'Referral source' code table, to indicate the referral source for the current episode / visit. The [Referral source	ST	String			Referral source	Refer to use case	Refer to use case
Encounter	Referral source local description		Local description of referral source for the current episode / visit, defined by healthcare institution	ST	String				Refer to use case	Refer to use case
Encounter	Referral specialty		Specialty of the eHR Participant indicated on the referral	CE	Coded Element			Specialty	Refer to use case	Refer to use case
Encounter	Referral specialty remarks		Details on specialty of the eHR Participant indicated on the referral	ST	String				Refer to use case	Refer to use case
Encounter	Case healthcare professional identifier		eHR identifier of the healthcare professional who in-charged the care	CE	Coded Element				Refer to use case	Refer to use case
Encounter	Case healthcare professional name prefix		English name prefix of the healthcare professional who in-charged the care	ST	String				Refer to use case	Refer to use case
Encounter	Case healthcare professional English surname		English surname of the healthcare professional who in-charged the care	ST	String				Refer to use case	Refer to use case
Encounter	Case healthcare professional English given name		English given of healthcare professional who in-charged the care	ST	String				Refer to use case	Refer to use case
Encounter	Case healthcare professional Chinese name		Chinese name of the healthcare professional who in-charged the care	ST	String				Refer to use case	Refer to use case
Encounter	Case healthcare professional Chinese name suffix		Chinese name suffix of the healthcare professional who in-charged the care	ST	String				Refer to use case	Refer to use case

Encounter codex – encounter type

eHR Sharable Data - Codex: Encounter type

Encounter type
Purpose: To identify the type of attendance
Reference:

Term ID	eHR Value	eHR Description
	A	Accident and emergency
	I	Inpatient
	O	Outpatient
	T	Consultation without face-to-face contact

Encounter codex – service type

eHR Sharable Data - Codex: Service Type

Service type
Purpose: To indicate type of outpatient encounter
Reference:

Term ID	eHR Value	eHR Description	Definition
	OPD	Outpatient consultation	General or specialist outpatient consultation and/or procedures provided by medicine practitioner(s)
	GOPD	General outpatient consultation	General outpatient consultation and/or procedures provided by medical practitioner(s)
	SOPD	Specialist outpatient consultation	Specialist outpatient consultation and/or procedures provided by medical practitioner(s)
	CM	Chinese medicine consultation	Chinese medicine consultation and/or procedures provided by Chinese medicine practitioner(s)
	CHIRO	Chiropractor consultation	Chiropractor consultation and/or procedures provided by chiropractor(s)
	DAY	Day hospital service	Day hospital service
	DCON	Dental service	Dental service including consultation and procedures
	NURSE	Nursing service	Nursing service including nursing counseling and procedures
	CC	Community Service	Community or outreach services
	AH	Allied health service	Allied health service
	PHAR	Pharmacy service	Pharmacy service
	LAB	Laboratory service	Laboratory service
	RAD	Radiology service	Radiology service including radiologist consultation and procedures
	OTH	Other	Other services not specified above

Encounter codex – urgency

eHR Sharable Data - Codex: Urgency

Urgency
Purpose: To indicate urgency of episode or visit
Reference: HA

Term ID	eHR Value	eHR Description	Validation rules
	E	Emergency	for Encounter type = I
	S	Scheduled	for Encounter type = I or O or T
	W	Walk-in	for Encounter type = O or T

Encounter codex – specialty (1/2)

eHR Sharable Data - Codex: Specialty

Specialty
Purpose: **To identify the specialty of a medical practitioner**
Reference: **Hong Kong Medical Council**

Term ID	eHR Value	eHR Description
	AM	Administrative Medicine
	ANA	Anaesthesiology
	AP	Anatomical Pathology
	CARDIO	Cardiology
	CTS	Cardio-thoracic Surgery
	CP	Chemical Pathology
	CMI	Clinical Microbiology and Infection
	ONC	Clinical Oncology
	CLIN_PHAR	Clinical Pharmacology and Therapeutics
	COM_MED	Community Medicine
	CRIT_MED	Critical Care Medicine
	DEN	Dental Medicine
	DERMAT	Dermatology & Venereology
	EM	Emergency Medicine
	ENDO_DM	Endocrinology, Diabetes & Metabolism
	FM	Family Medicine
	FP	Forensic Pathology
	GI_HEP	Gastroenterology and Hepatology
	SUR	General Surgery
	GER	Geriatric Medicine
	GYN_ONC	Gynaecological Oncology
	HM	Haematology
	HAEMAT	Haematology & Haematological Oncology
	IMM	Immunology
	IMMUNO	Immunology & Allergy
	INFECT_D	Infectious Disease
	ICU	Intensive Care
	MED	Internal Medicine

Encounter codex – specialty (2/2)

Specialty
Purpose: **To identify the specialty of a medical practitioner**
Reference: **Hong Kong Medical Council**

Term ID	eHR Value	eHR Description
	OBS	Maternal & Fetal Medicine
	MED_ONCO	Medical Oncology
	NEPHRO	Nephrology
	NEUROL	Neurology
	NS	Neurosurgery
	NM	Nuclear Medicine
	O&G	Obstetrics & Gynaecology
	OCC_MED	Occupational Medicine
	OPH	Ophthalmology
	ORT	Orthopaedics & Traumatology
	OTH	Others
	ENT	Otorhinolaryngology
	PAE_SUR	Paediatric Surgery
	PAE	Paediatrics
	PAL_MED	Palliative Medicine
	PATH	Pathology
	PLASTIC_S	Plastic Surgery
	PSY	Psychiatry
	PH_MED	Public Health Medicine
	RAD	Radiology
	REH	Rehabilitation
	REP_MED	Reproductive Medicine
	TBC	Respiratory Medicine
	RHEUMA	Rheumatology
	URO_GYN	Urogynaecology
	UROL	Urology

Encounter codex – attendance indicator

eHR Sharable Data - Codex: Attendance indicator

Attendance indicator
Purpose: To indicate whether the booked appointment has attended or not
Reference: HA

Term ID	eHR Value	eHR Description
	A	Attended
	C	Cancelled
	N	Not attended

Encounter codex – yes no

eHR Sharable Data - Codex: Yes No

Yes No
Reference : HL7

Term ID	eHR Value	eHR Description
	Y	Yes
	N	No

Encounter codex – discharge type

eHR Sharable Data - Codex: Discharge type

Discharge type
Purpose: To indicate the category of location where the person was discharged from an inpatient / accident & emergency episode
Reference: HA

Term ID	eHR Value	eHR Description
	N-ACUTE	Discharged and sent to non-acute hospital
	ACUTE	Discharged and sent to acute hospital
	HOME	Discharged home without follow up
	H+FU	Discharged home with follow up
	DAMA	Discharge with acknowledgement to medical advice
	DEATH	Death
	MISS	Missing
	WA	Walk away
	OTHER	Others

Encounter codex – referral source

eHR Sharable Data - Codex: Referral source

Referral source
Purpose: To identify the source for referring the person for inpatient, outpatient or accident & emergency attendance
Reference: HL7 Table 0023 Admission Source, HL7 Table 0284 Referral category

Term ID	eHR Value	eHR Description
	A	Accident and emergency
	I	Inpatient
	O	Outpatient

Encounter codex – Healthcare professional name English name prefix

Healthcare staff English name prefix
Purpose : Title to address the healthcare staff in English
Reference : OGCIO

Term ID	eHR Value	eHR Description
	Prof	Professor
	Dr	Doctor

Encounter codex – Healthcare professional name Chinese name suffix

Healthcare staff Chinese name suffix
Purpose : Title to address the healthcare staff in Chinese
Reference : OGCIO

Term ID	eHR Value	eHR Description
	教授	教授
	醫生	醫生
	醫師	醫師

END

THANK YOU VERY MUCH!