Preparation for eHR - Briefing on eHR content

Encounter

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Domains

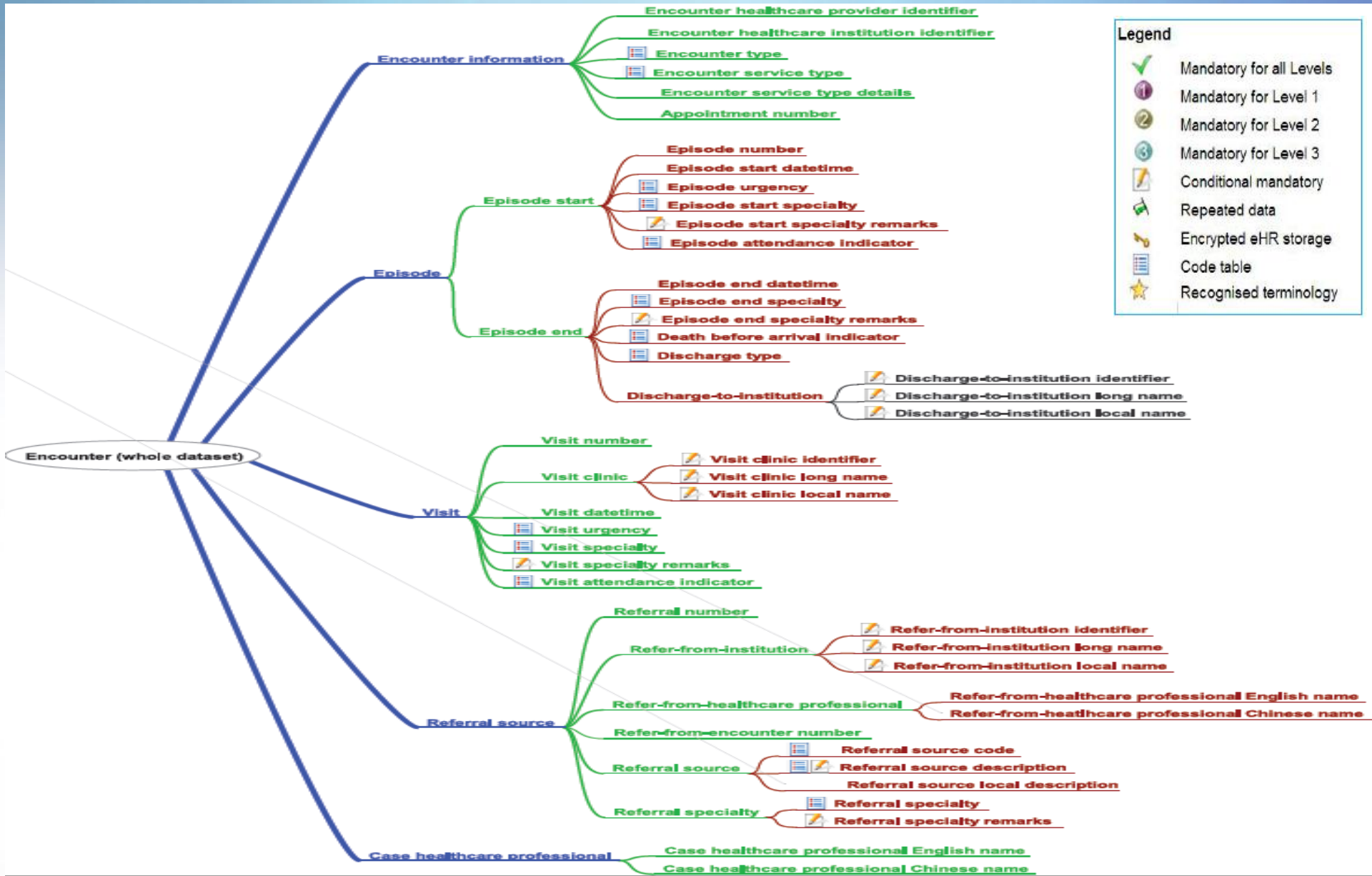
- eHR Healthcare Recipient
- Encounter
- Immunisation

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

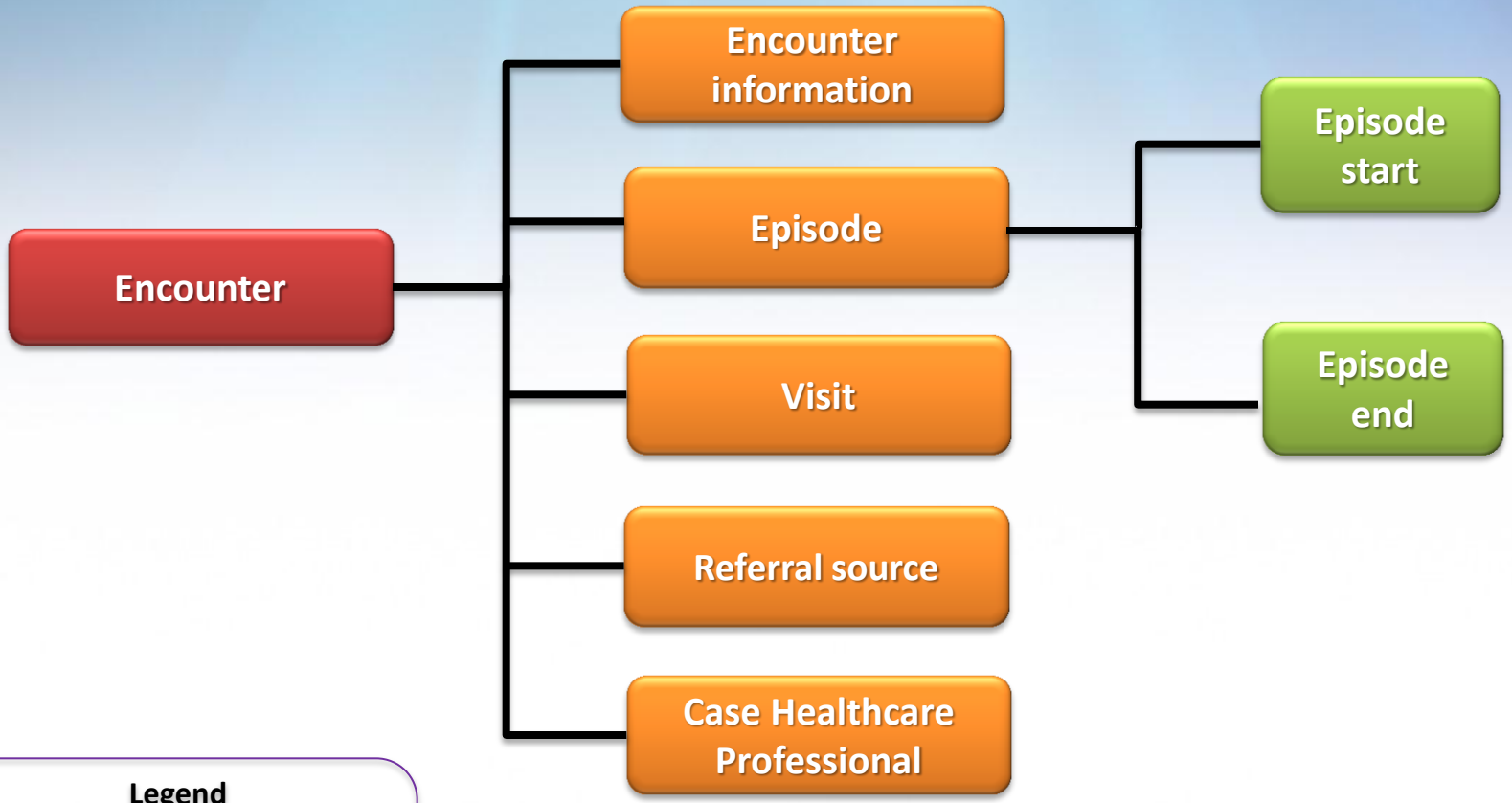


Changes in Encounter Dataset

(since 1st eHR Content Briefing in Jul 2012)

1. Rename ‘Entity name’ in dataset
   - to make the entity name more explicitly to ‘encounter domain’
2. Refine ‘Definition’ in dataset
   - to align with other eHR content domains and describe the data nature more clearly
3. Refine data content within this domain
   - to add / delete data entities

Encounter Data



Legend

(changes in Encounter dataset since the 1st eHR Content Briefing in Jul 2012)

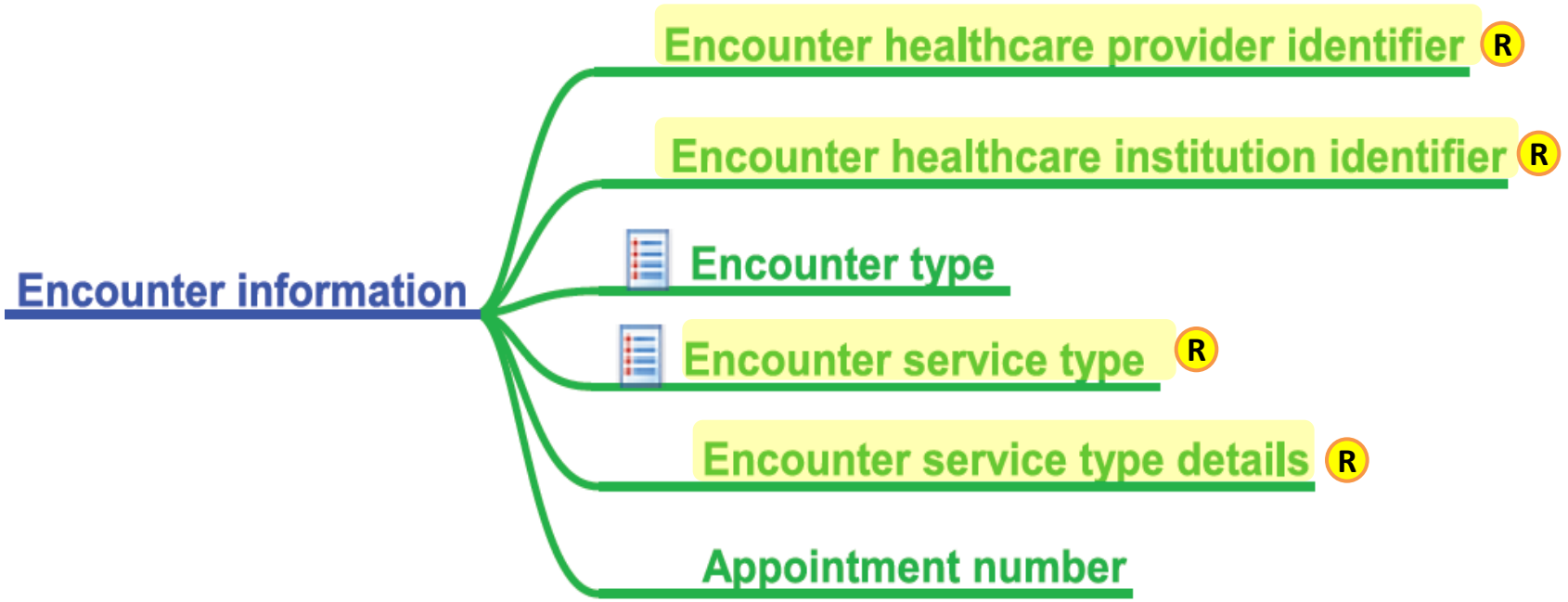
A Added

R Renamed

D Deleted

Encounter Information

Encounter information | Episode (Episode start | Episode end) | Visit | Referral source | Case healthcare professional



Legend

(changes in Encounter dataset since the 1st eHR Content Briefing in Jul 2012)

- A Added
- R Renamed
- D Deleted

Code Table | Conditional mandatory | 3 Mandatory for Level 3 – refer to use case

Episode start

Encounter information | **Episode** (Episode start | Episode end) | Visit | Referral source | Case healthcare professional

Legend
(changes in Encounter dataset since the 1st eHR Content Briefing in Jul 2012)

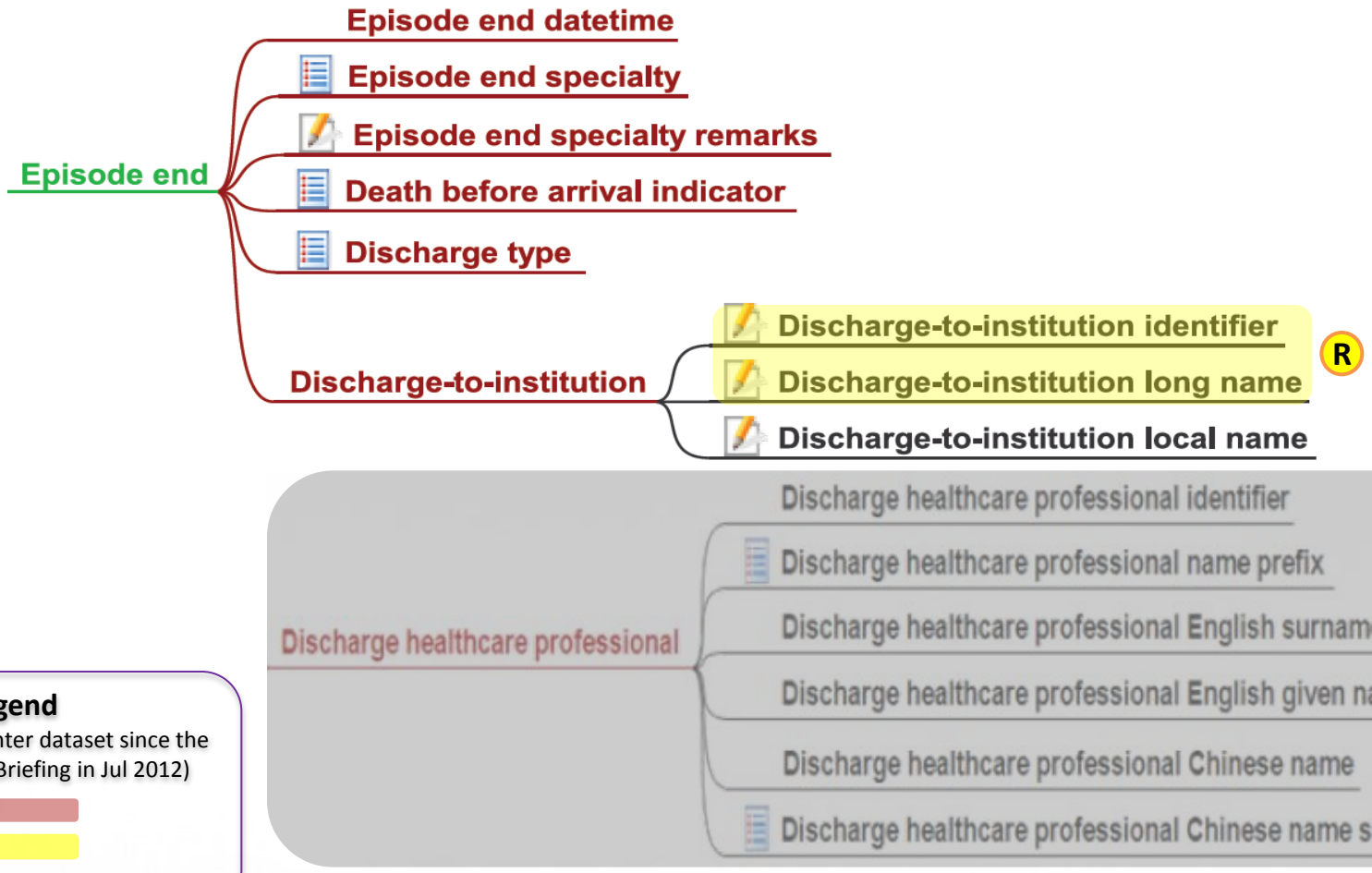
- A Added
- R Renamed
- D Deleted

No change

Code Table | Conditional mandatory | 3 Mandatory for Level 3 – refer to use case

Episode end

Encounter information | **Episode** (Episode start | Episode end) | Visit | Referral source | Case healthcare professional



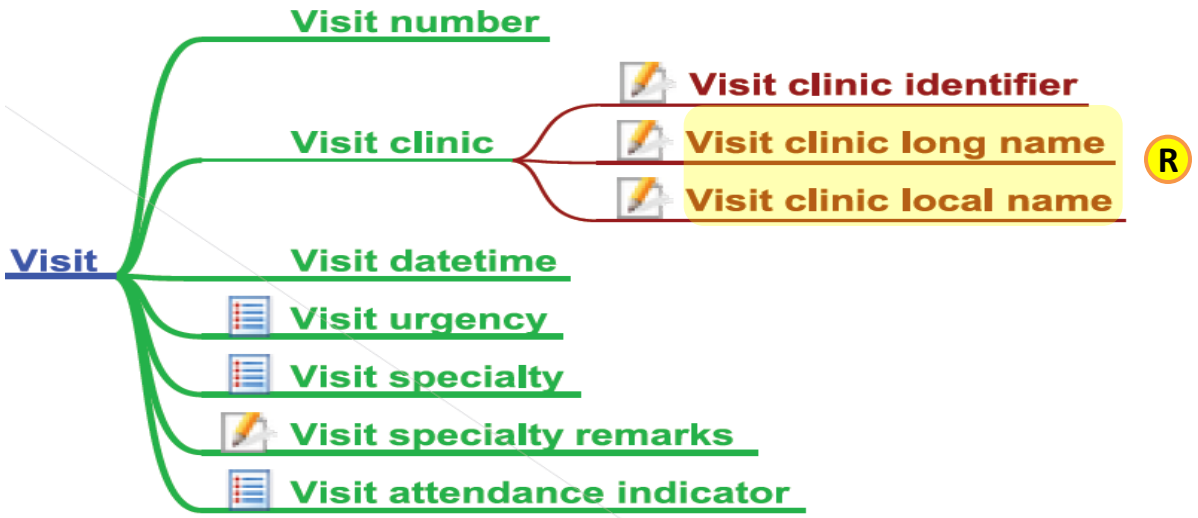
Legend
(changes in Encounter dataset since the 1st eHR Content Briefing in Jul 2012)

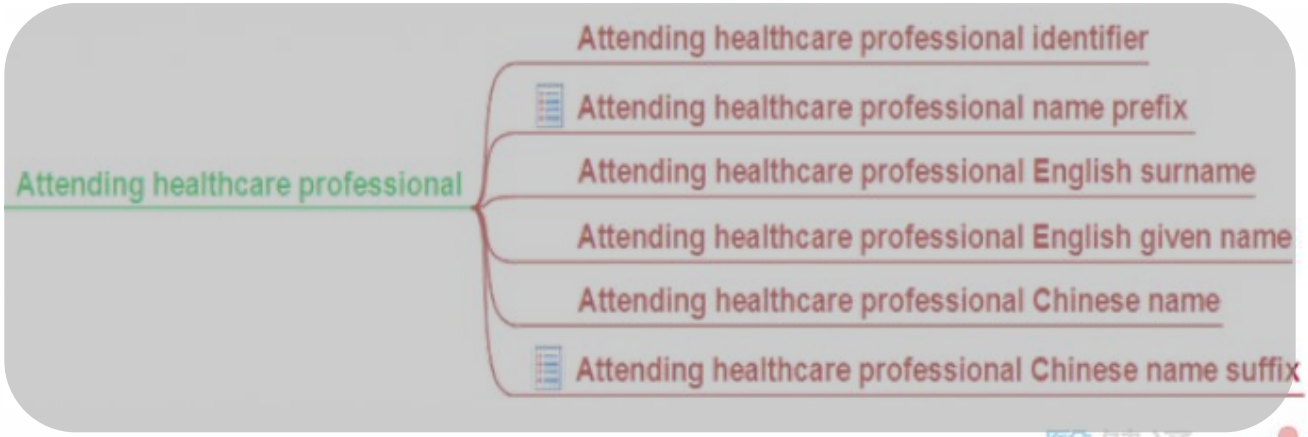
- A Added
- R Renamed
- D Deleted

Code Table | Conditional mandatory | 3 Mandatory for Level 3 – refer to use case

Visit

Encounter information | Episode (Episode start | Episode end) | **Visit** | Referral source | Case healthcare professional





Legend

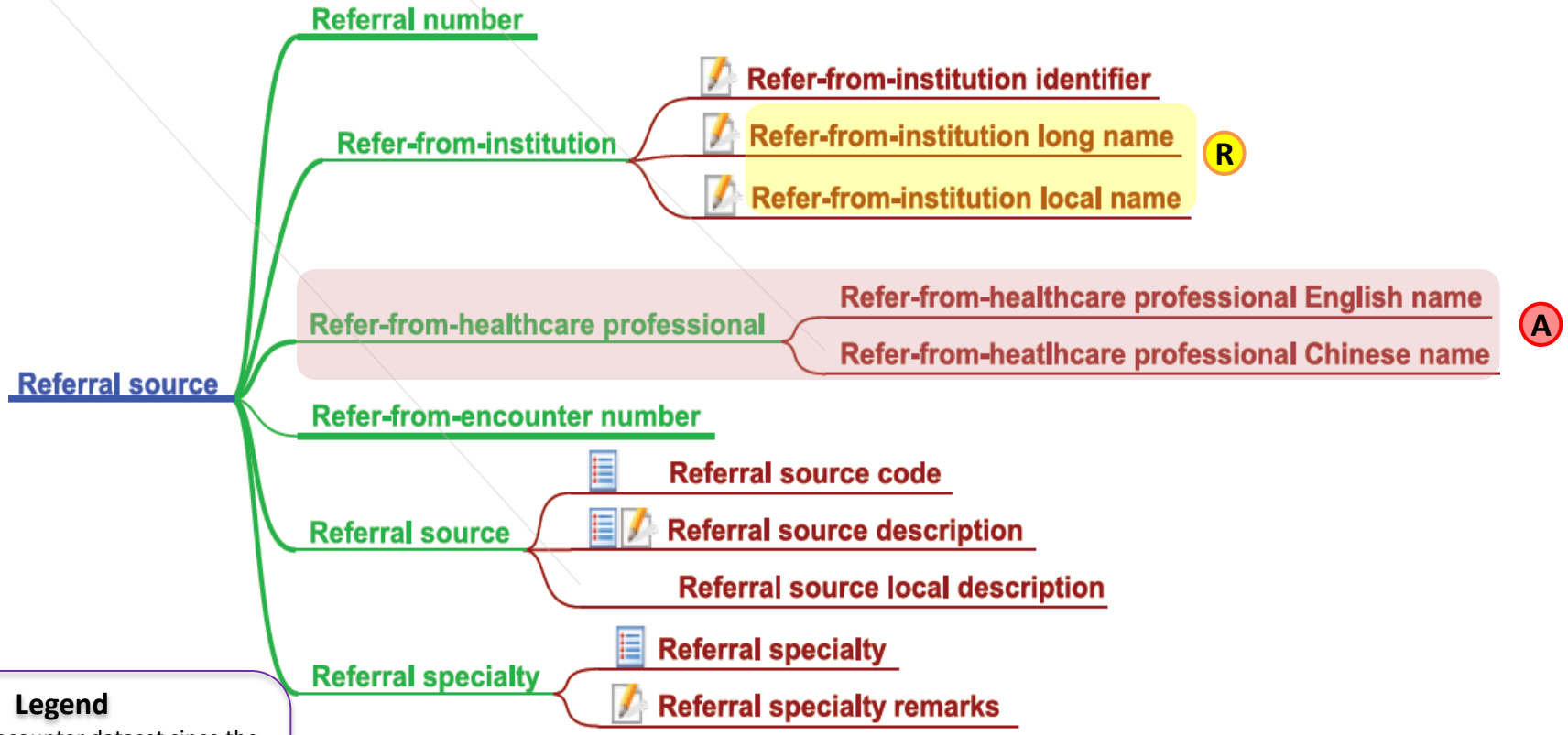
(changes in Encounter dataset since the 1st eHR Content Briefing in Jul 2012)

- A Added
- R Renamed
- D Deleted

Code Table | Conditional mandatory | 3 Mandatory for Level 3 – refer to use case

Referral source

Encounter information | Episode (Episode start | Episode end) | Visit | **Referral source** | Case healthcare professional



Legend
(changes in Encounter dataset since the 1st eHR Content Briefing in Jul 2012)

- A Added
- R Renamed
- D Deleted

Code Table | Conditional mandatory | 3 Mandatory for Level 3 – refer to use case

Case healthcare professional

Encounter information | Episode (Episode start | Episode end) | Visit | Referral source | Case healthcare professional

Legend

(changes in Encounter dataset since the 1st eHR Content Briefing in Jul 2012)

- A Added
- R Renamed
- D Deleted

Code Table | Conditional mandatory | 3 Mandatory for Level 3 – refer to use case

No level 1 & 2 data

Encounter Scenarios

Mandatory fields are different in different encounter scenarios

Accident & Emergency
(admission & discharge)

Inpatient
(appointment, admission & discharge

Outpatient
(appointment & attendance)

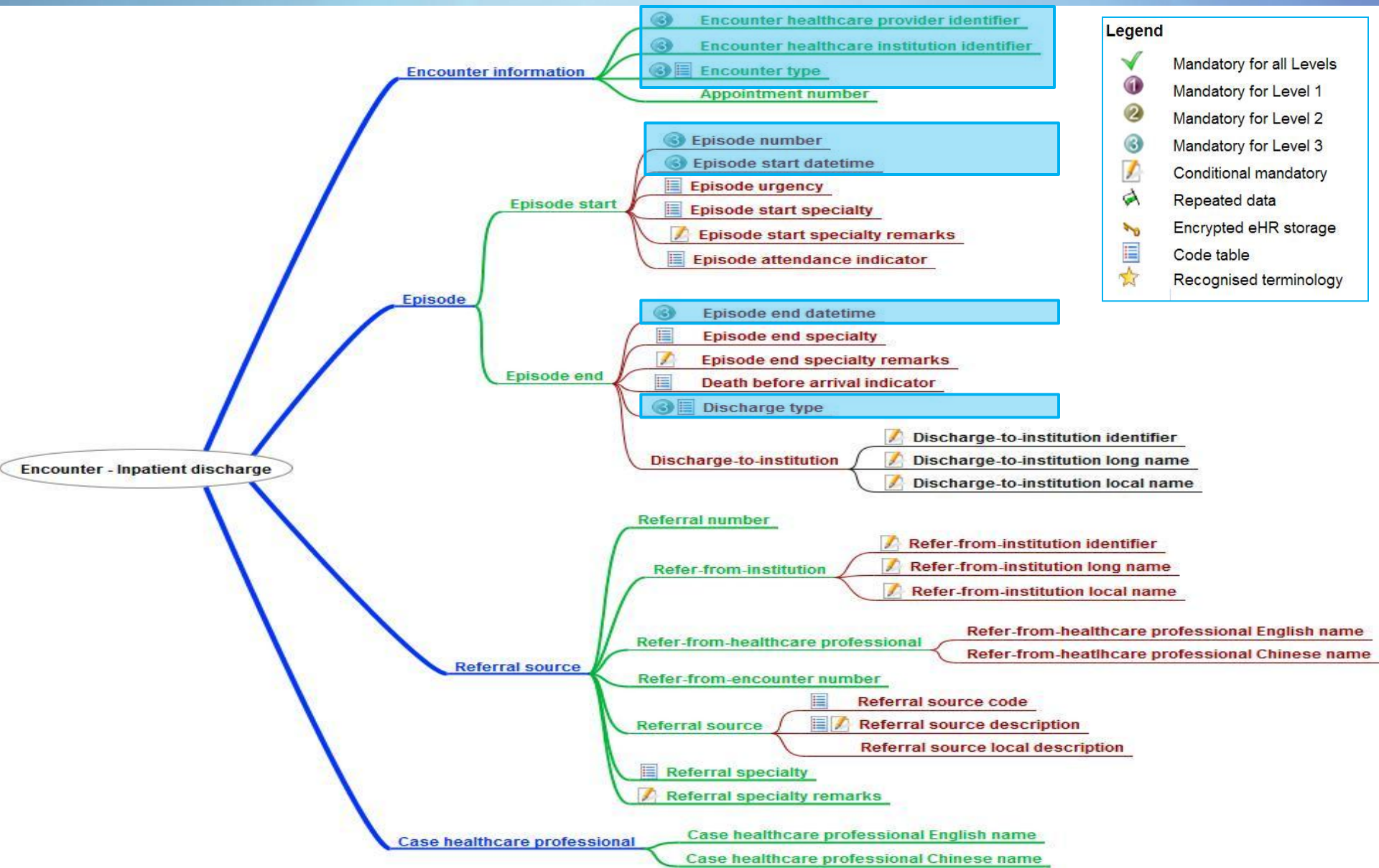
No change

Other
(appointment & attendance)

New

Encounter: Example – Level 3
Inpatient Discharge – mindmap

No change



Encounter: Example – Level 3
Inpatient Discharge – mandatory data

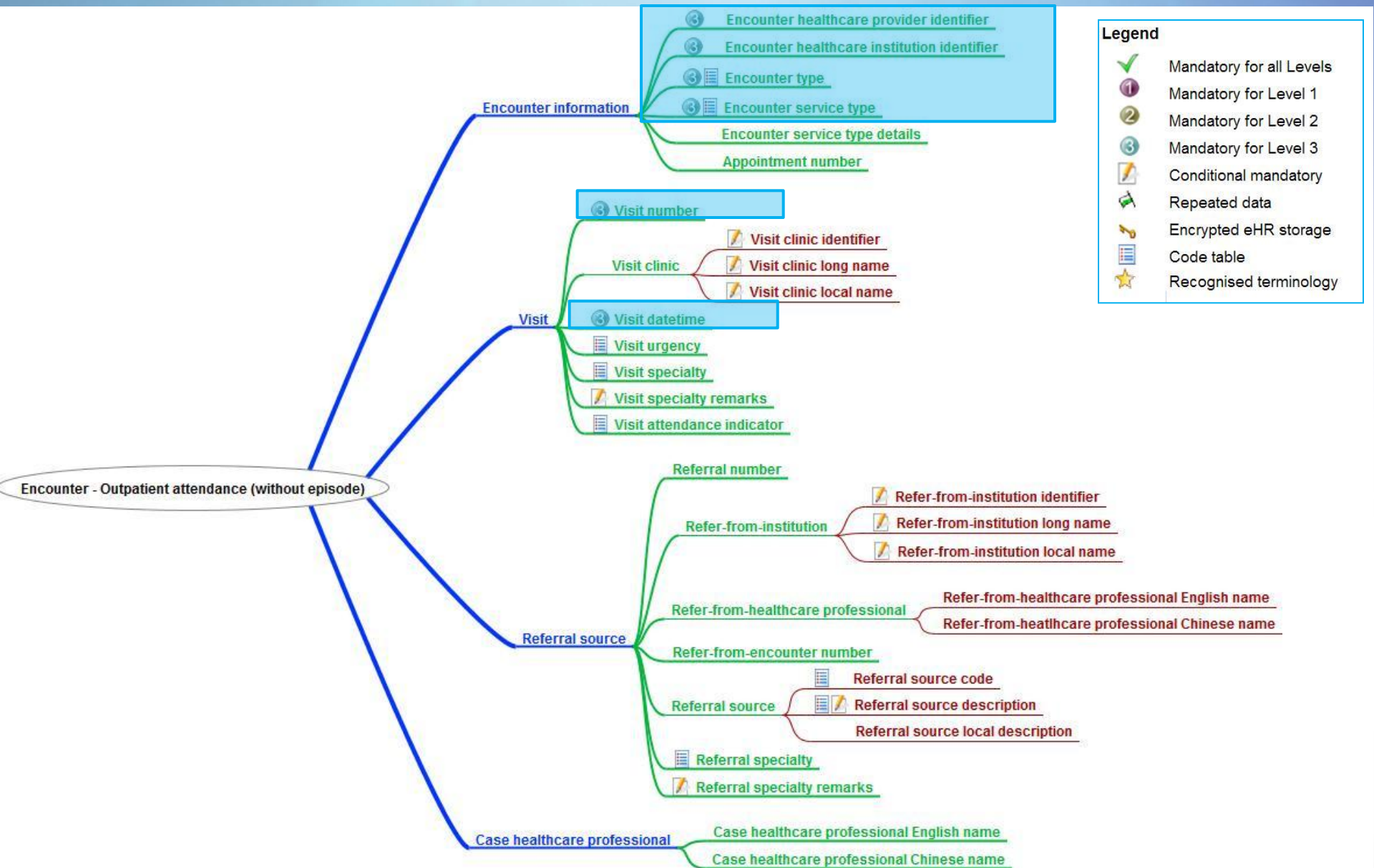
No change

Entity Name	Data Requirement Certified Level 3)	Example (Certified Level 3)
Encounter healthcare provider identifier	**M**	12345 67890
Encounter healthcare institution identifier	**M**	12345 67894
Encounter type	**M**	Inpatient
Episode number	**M**	223344
Episode start datetime	**M**	11 Jun 2013 10:15:36
Episode end datetime	**M**	13 Jun 2013 12:10:10
Discharge type	**M**	Home

Encounter: Example – Level 3

Outpatient attendance – mindmap

No change



Encounter: Example – Level 3

No change

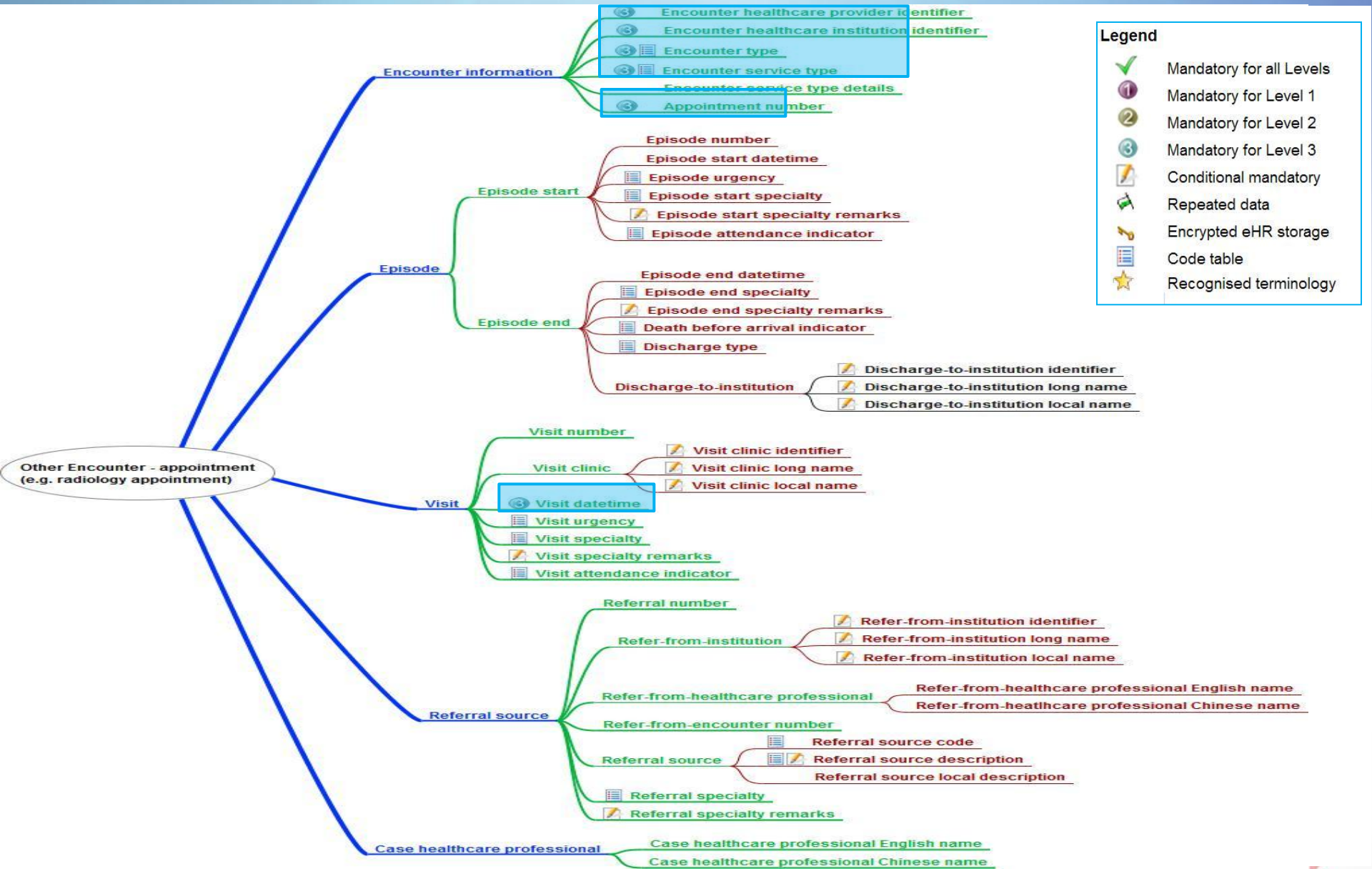
Outpatient appointment – mandatory data

Entity Name	Data Requirement Certified Level 3)	Example (Certified Level 3)
Encounter healthcare provider identifier	**M**	54321 12300
Encounter healthcare institution identifier	**M**	54321 12345
Encounter type	**M**	Outpatient
Encounter service type	**M**	Specialist outpatient consultation
Visit number	**M**	22233
Visit datetime	**M**	20 Jun 2013 12:10:10

Encounter: Example – Level 3

Other Encounter (appointment) – mindmap

NEW



New Encounter Scenario

NEW

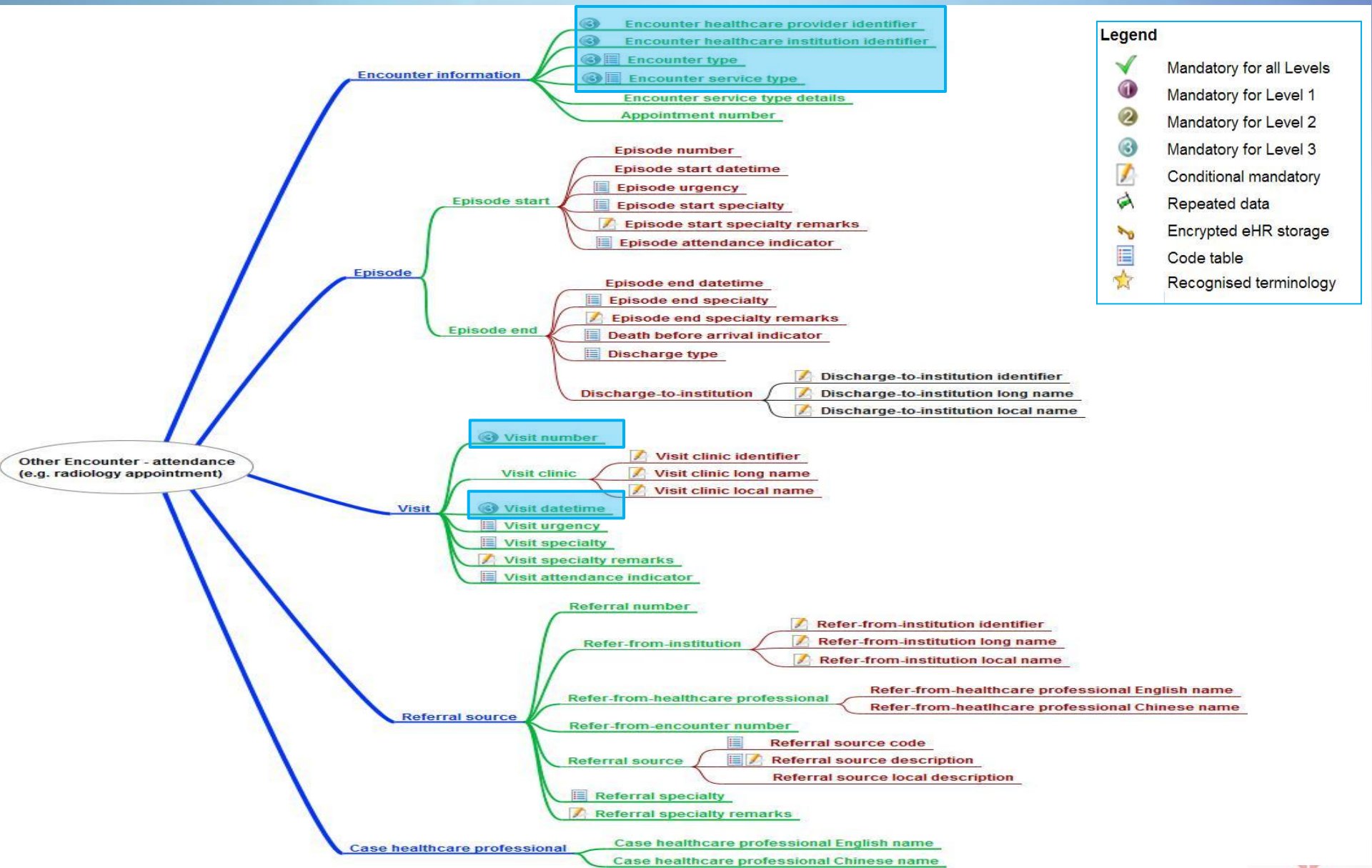
Other Encounter (appointment) – mandatory data

Entity Name	Data Requirement (Certified Level 3)	Example (Certified Level 3)
Encounter healthcare provider identifier	M	54321 12300
Encounter healthcare institution identifier	M	54321 12345
Encounter type	M	Other encounter type
Encounter service type	M	Radiology service
Appointment number	M	5589
Visit datetime	M	01/08/2013 10:00:00

Encounter: Example – Level 3

Other Encounter (attendance) – mindmap

NEW



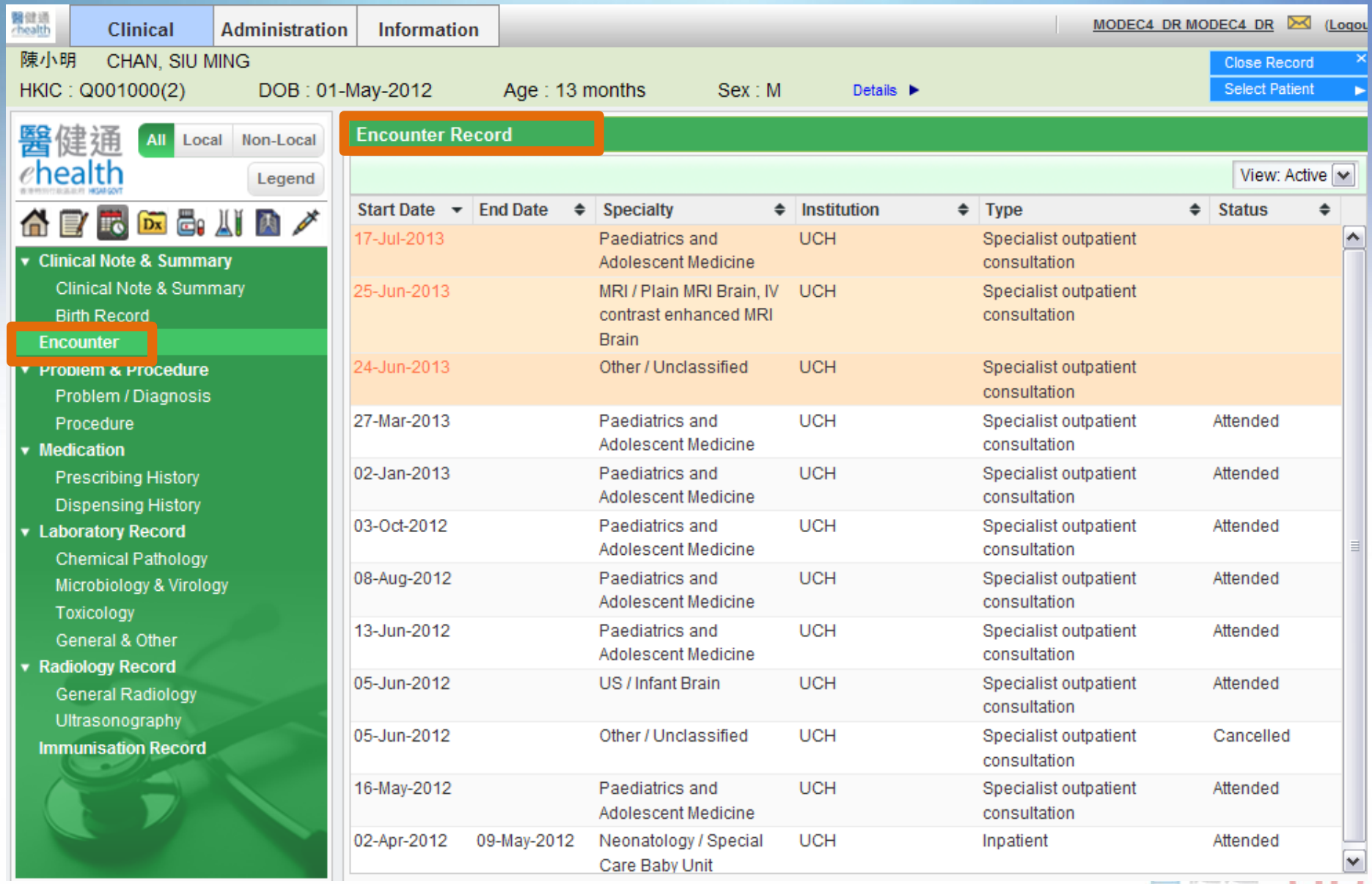
New Encounter Scenario

NEW

Other Encounter (attendance) – mandatory data

Entity Name	Data Requirement (Certified Level 3)	Example (Certified Level 3)
Encounter healthcare provider identifier	M	54321 12300
Encounter healthcare institution identifier	M	54321 12345
Encounter type	M	Other encounter type
Encounter service type	M	Radiology service
Visit number	M	4685
Visit datetime	M	01/08/2013 10:00:00

eHR viewer – Screen layout



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	Cancelled
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

Related Files

- Data schema
  - Encounter (R)
- Codex
  - Encounter type
  - Service type
  - Urgency
  - Specialty
  - Attendance indicator
  - Yes/No

  (R)
  - Discharge type
  - Referral source

  (R)
  - Healthcare staff English name prefix
  - Healthcare staff Chinese name suffix

  (D)

Legend
(changes in Encounter dataset since the 1st eHR Content Briefing in Jul 2012)

- (A) Added
- (R) Refined
- (D) Deleted

Encounter – data schema (1/4)

eHR Sharable Data - Encounter Record

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	Encounter healthcare provider identifier	1003803	[Healthcare provider identifier] in the Healthcare Provider Index for the healthcare provider who created the encounter	ST	String				Refer to use case	Refer to use case
Encounter	Encounter healthcare institution identifier	1003804	[Healthcare institution identifier] in the Healthcare Provider Index for the healthcare institution who created the encounter	ST	String				Refer to use case	Refer to use case
Encounter	Encounter type	1003805	[eHR value] of the "Encounter type" code table which is used to identify the type of the encounter received / to be received by the patient	CE	Coded Element			Encounter type	Refer to use case	Refer to use case
Encounter	Encounter service type	1003806	[eHR value] of the "Service type" code table which is used to identify the type of encounter service received / to be received by the patient	CE	Coded Element	1) Only for Encounter type = O / T / H 2) if Encounter type = H, Service type must NOT be = 'OPD', 'GOPD', or 'SOPD'		Service Type	Refer to use case	Refer to use case
Encounter	Encounter service type details	1003807	Details on the outpatient service type received / to be received by the patient	TX	Text				Refer to use case	Refer to use case
Encounter	Appointment number	1003808	A unique reference number assigned by the healthcare institution to an appointment (a scheduled encounter)	ST	String				Refer to use case	Refer to use case
Encounter	Episode number	1003809	A unique reference number assigned by the healthcare institution to an episode of care. An episode is composed of one or more encounter(s). The episode of care can be of inpatient or outpatient nature.	ST	String				Refer to use case	Refer to use case
Encounter	Episode start datetime	1003810	The date and time when the episode of care is started. If it is a future date or time, it represents a scheduled episode.	TS	Time stamp				Refer to use case	Refer to use case
Encounter	Episode urgency	1003811	[eHR value] of the "Urgency" code table. [Episode urgency] refers to the urgency of the care when the episode was started.	CE	Coded Element	1) If Urgency type is 'E', Encounter type must be 'I' or 'T' or 'H' 2) If Urgency type is 'S', Encounter type must be 'I' or 'O' or 'T' or 'H' 3) If Urgency type is 'W', Encounter type must be 'O' or 'H'		Urgency	Refer to use case	Refer to use case
Encounter	Episode start specialty	1003812	[eHR value] of the "Specialty" code table. [Episode start specialty] refers to the specialty of the patient upon commencement of an episode.	CE	Coded Element			Specialty	Refer to use case	Refer to use case
Encounter	Episode start specialty remarks	1003813	Details on specialty of the patient upon commencement of an episode	ST	String				Refer to use case	Refer to use case

Encounter – data schema (2/4)

eHR Sharable Data - Encounter Record

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	Episode attendance indicator	1003814	[eHR value] of the "Attendance indicator" code table. [Episode attendance indicator] is an indicator to identify 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	1003815	The date and time when the episode of care was ended	TS	Time stamp				Refer to use case	Refer to use case
Encounter	Episode end specialty	1003816	[eHR value] of the "Specialty" code table. [Episode end specialty] refers to the specialty of the patient upon completion of an episode.	CE	Coded Element			Specialty	Refer to use case	Refer to use case
Encounter	Episode end specialty remarks	1003817	Details on specialty of the patient upon completion of an episode.	ST	String				Refer to use case	Refer to use case
Encounter	Death before arrival indicator	1003818	[eHR value] of the "Yes / No" code table. [Death before arrival indicator] is an indicator to identify whether the patient was dead before arrival to the healthcare institution.	CE	Coded Element			Yes No	Refer to use case	Refer to use case
Encounter	Discharge type	1003819	[eHR value] of the "Discharge type" code table which is used to indicate category of location where the patient was discharged from an inpatient / accident & emergency episode	CE	Coded Element			Discharge type	Refer to use case	Refer to use case
Encounter	Discharge-to-institution identifier	1003820	[Healthcare institution identifier] in the Healthcare Provider Index for the healthcare institution where the patient was discharged to	ST	String				Refer to use case	Refer to use case
Encounter	Discharge-to-institution long name	1003821	[Healthcare institution displayed English long name] or the [Healthcare institution displayed Chinese long name] in the Healthcare Provider Index for the healthcare institution where the patient was discharged to. It should be the corresponding description of the selected [Discharge-to-institution identifier].	ST	String	1) [Discharge-to-institution long name] should match with [Discharge-to-institution identifier]. If unmatched, display [Discharge-to-institution local name]			Refer to use case	Refer to use case
Encounter	Discharge-to-institution local name	1003822	Local description of the healthcare institution where the patient was discharged to	ST	String				Refer to use case	Refer to use case
Encounter	Visit number	1003823	A unique reference number assigned by the healthcare institution to a particular visit for healthcare service which the patient received / will receive	ST	String				Refer to use case	Refer to use case
Encounter	Visit clinic identifier	1003824	[Healthcare institution identifier] in the Healthcare Provider Index for the healthcare institution where the patient received / will receive healthcare services	ST	String				Refer to use case	Refer to use case

Encounter – data schema (3/4)

eHR Sharable Data - Encounter Record

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	Visit clinic long name	1003825	[Healthcare institution displayed English long name] or [Healthcare institution displayed Chinese long name] in the Healthcare Provider Index for the healthcare institution where the patient received / will receive healthcare services. It should be the corresponding description of the selected [Visit clinic identifier].	ST	String	1) [Visit clinic long name] should match with [Visit clinic identifier]. If unmatched, display [Visit clinic local name]			Refer to use case	Refer to use case
Encounter	Visit clinic local name	1003826	Local description of the healthcare institution where the patient received / will receive healthcare services	ST	String				Refer to use case	Refer to use case
Encounter	Visit datetime	1003827	The date and time of the visit. If it is a future date or time, it represents an healthcare service appointment	TS	Time stamp				Refer to use case	Refer to use case
Encounter	Visit urgency	1003828	[eHR value] of the "Urgency" code table. [Visit urgency] refers to the urgency of the care of the visit.	CE	Coded Element	1) If Urgency type is 'E', Encounter type must be 'I' or 'T' or 'H' 2) If Urgency type is 'S', Encounter type must be 'I' or 'O' or 'T' or 'H' 3) If Urgency type is 'W', Encounter type must be 'O' or 'H'		Urgency	Refer to use case	Refer to use case
Encounter	Visit specialty	1003829	[eHR value] of the "Specialty" code table. [Visit specialty] refers to the specialty for the visit.	CE	Coded Element			Specialty	Refer to use case	Refer to use case
Encounter	Visit specialty remarks	1003830	Details on specialty of the patient for the visit	ST	String				Refer to use case	Refer to use case
Encounter	Visit attendance indicator	1003831	[eHR value] of the "Attendance indicator" code table. [Visit attendance indicator] is an indicator to identify whether the visit has been attended.	CE	Coded Element			Attendance indicator	Refer to use case	Refer to use case
Encounter	Referral number	1003832	A unique number issued by the healthcare institution for each referral	ST	String				Refer to use case	Refer to use case
Encounter	Refer-from-institution identifier	1003833	[Healthcare institution identifier] in the Healthcare Provider Index for the healthcare institution where the patient is referred from	ST	String				Refer to use case	Refer to use case
Encounter	Refer-from-institution long name	1003834	[Healthcare institution displayed English long name] or [Healthcare institution displayed Chinese long name] in the Healthcare Provider Index for the healthcare institution where the patient is referred from. It should be the corresponding description of the selected [Refer-from-institution identifier].	ST	String	1) [Refer-from-institution long name] should match with [Refer-from-institution identifier]. If unmatched, display [Refer-from-institution local name]			Refer to use case	Refer to use case
Encounter	Refer-from-institution local name	1003835	Local description of the healthcare institution where the patient is referred from	ST	String				Refer to use case	Refer to use case

Encounter – data schema (4/4)

eHR Sharable Data - Encounter Record

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-healthcare professional English name	1003836	Full English name with prefix of the healthcare professional who referred the episode	ST	String				Refer to use case	Refer to use case
Encounter	Refer-from-healthcare professional Chinese name	1003837	Full Chinese name with suffix of the healthcare professional who referred the episode	ST	String				Refer to use case	Refer to use case
Encounter	Refer-from-encounter number	1003838	A unique reference number assigned by the healthcare institution, e.g. episode number or visit number, to a particular episode / visit under which the referral was made	ST	String				Refer to use case	Refer to use case
Encounter	Referral source code	1003839	[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	1003840	[eHR description] of the "Referral source" code table, to indicate the referral source for the current episode / visit. The [Referral source description] should be the corresponding description of the selected [Referral source code].	CE	Coded Element			Referral source	Refer to use case	Refer to use case
Encounter	Referral source local description	1003841	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	1004034	The specialty of the patient in which the referral was initiated	CE	Coded Element			Specialty	Refer to use case	Refer to use case
Encounter	Referral specialty remarks	1003843	Details on specialty of the patient in which the referral was initiated	ST	String				Refer to use case	Refer to use case
Encounter	Case healthcare professional English name	1003844	Full English name with prefix of the healthcare professional who was in-charge of the care	ST	String				Refer to use case	Refer to use case
Encounter	Case healthcare professional Chinese name	1003845	Full Chinese name with suffix of the healthcare professional who was in-charge of 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 encounter received / to be received by the patient
Reference: ---

Term ID	eHR Value	eHR Description
	A	Accident and emergency
	I	Inpatient
	O	Outpatient
	T	Consultation without patient's physical presence
	H	Other encounter type

Encounter codex – Service type

Service type
Purpose: To indicate type of encounter service being received / to be received by the patient
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 service type	Other services not specified above

Encounter codex – Urgency

eHR Sharable Data - Codex: Urgency

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

Term ID	eHR Value	eHR Description
	E	Emergency
	S	Scheduled
	W	Walk-in

Encounter codex – Specialty (1/2)

eHR Sharable Data - 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
	ANA	Anaesthesiology
	AUD	Audiology
	CARDIO	Cardiology
	CLIN_PHAR	Clinical Pharmacology and Therapeutics
	CLPSY	Clinical Psychology
	COM_MED	Community Medicine
	CRIT_MED	Critical Care Medicine
	CTS	Cardio-thoracic Surgery
	DEN	Dental Medicine
	DERMAT	Dermatology & Venereology
	EM	Emergency Medicine
	ENDO_DM	Endocrinology, Diabetes & Metabolism
	ENT	Otorhinolaryngology
	FM	Family Medicine
	GER	Geriatric Medicine
	GI_HEP	Gastroenterology and Hepatology
	GYN_ONC	Gynaecological Oncology
	HAEMAT	Haematology & Haematological Oncology
	ICU	Intensive Care
	IMMUNO	Immunology & Allergy
	INFECT_D	Infectious Disease
	MED	Internal Medicine
	MED_ONCO	Medical Oncology
	MSW	Medical Social Work
	NEPHRO	Nephrology
	NEUROL	Neurology

Encounter codex – Specialty (2/2)

eHR Sharable Data - 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
	NS	Neurosurgery
	OBS	Maternal & Fetal Medicine
	OCCMED	Occupational Medicine
	OG	Obstetrics & Gynaecology
	ONC	Clinical Oncology
	OPH	Ophthalmology
	OPT	Optometry
	ORT	Orthopaedics & Traumatology
	ORTH	Orthoptics
	OT	Occupational Therapy
	OTH	Other specialty
	P&O	Prosthetics & Orthotics
	PAE	Paediatrics
	PAESUR	Paediatric Surgery
	PALMED	Palliative Medicine
	PATH	Pathology
	PLASTICS	Plastic Surgery
	POD	Podiatry
	PSY	Psychiatry

Encounter codex – Attendance Indicator

eHR Sharable Data - Codex: Attendance indicator

Attendance indicator
Purpose: To indicate whether the booked episode or visit has attended or not, or cancelled
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 patient was discharged from an inpatient / accident & emergency episode
Reference: HA

Term ID	eHR Value	eHR Description
	NACUTE	Discharged and sent to non-acute hospital
	ACUTE	Discharged and sent to acute hospital
	HOME	Discharged home without follow up
	HFU	Discharged home with follow up
	DAMA	Discharged with acknowledgement to medical advice
	DEATH	Death
	MISS	Missing
	WA	Walk away
	OTHER	Other discharge type

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

~ End ~
Thank you