Seminar on eHR Content

28 June 2013

By Karen Szeto

Health Informatician, eHRISO

Domains

- Birth record
- Allergy
- Adverse drug reaction
- Clinical note / summary
- Investigation report

BIRTH RECORD

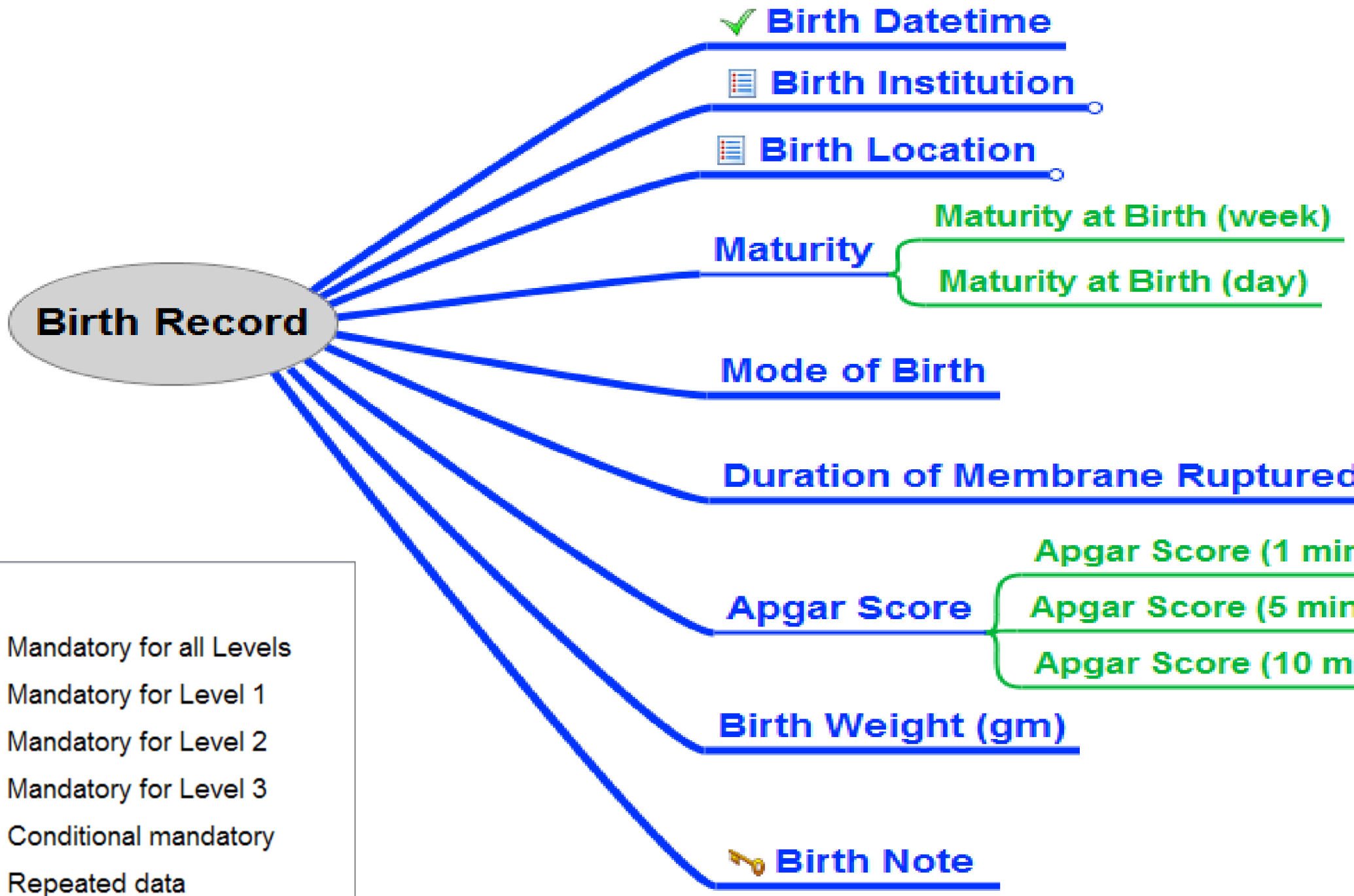
Birth record

- Basic information about the healthcare recipient's birth, e.g. *place of birth, birth weight, maturity…*

- Part of the information relating to birth would be fallen under the other sharable scope, *e.g. diagnosis, procedure, assessment*

- **Level 1, 2 & 3 data**

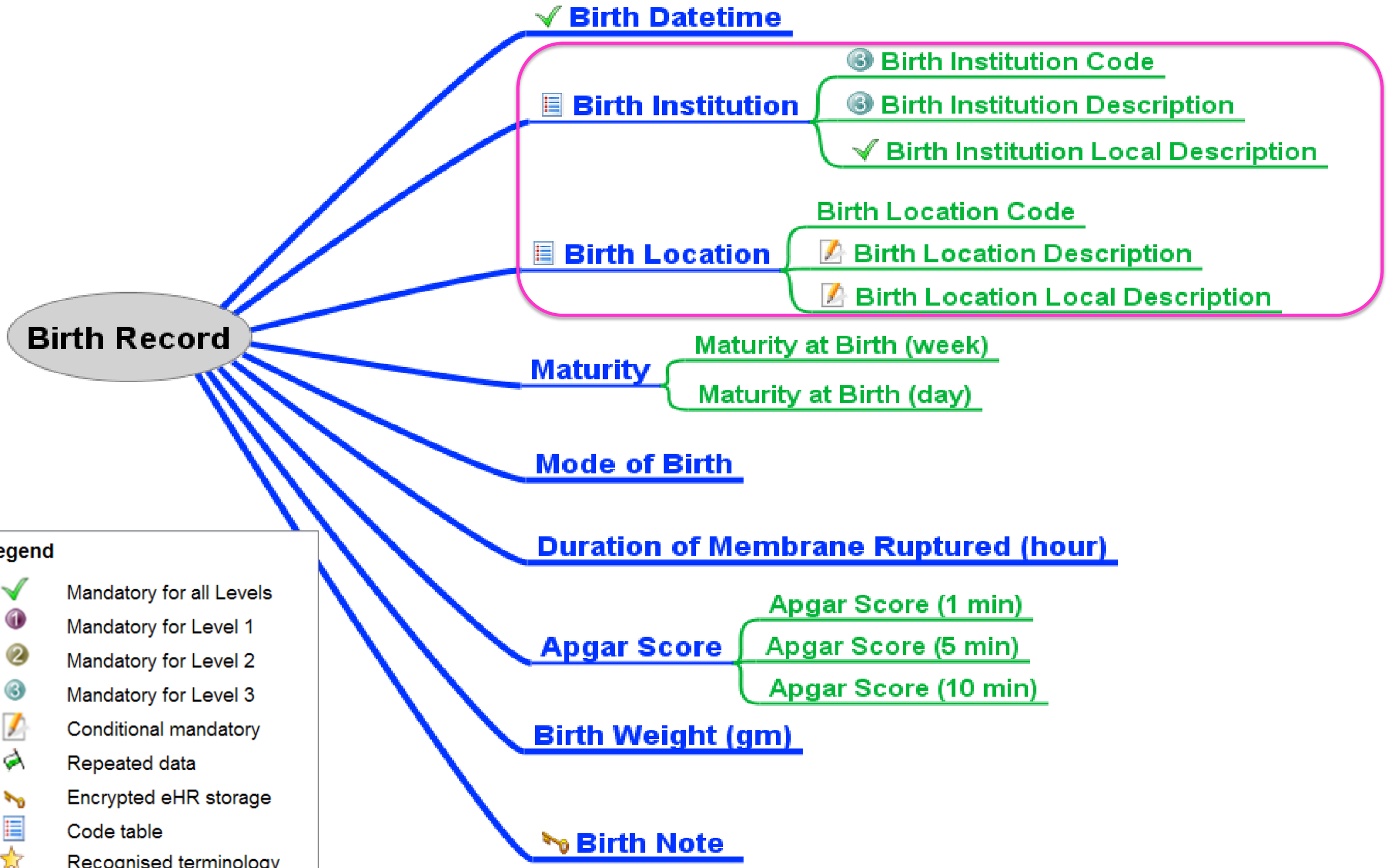
Mind map: Birth record (1)



Legend

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

Mind map: Birth record (2)



Example – Level 1 (Birth record)

Entity Name	Data requirement (Certified Level 1)	Example (Certified Level 1)
Birth datetime	M	11/02/2012
Birth institution local description	M	St. Paul Hospital
Birth note	O	abc

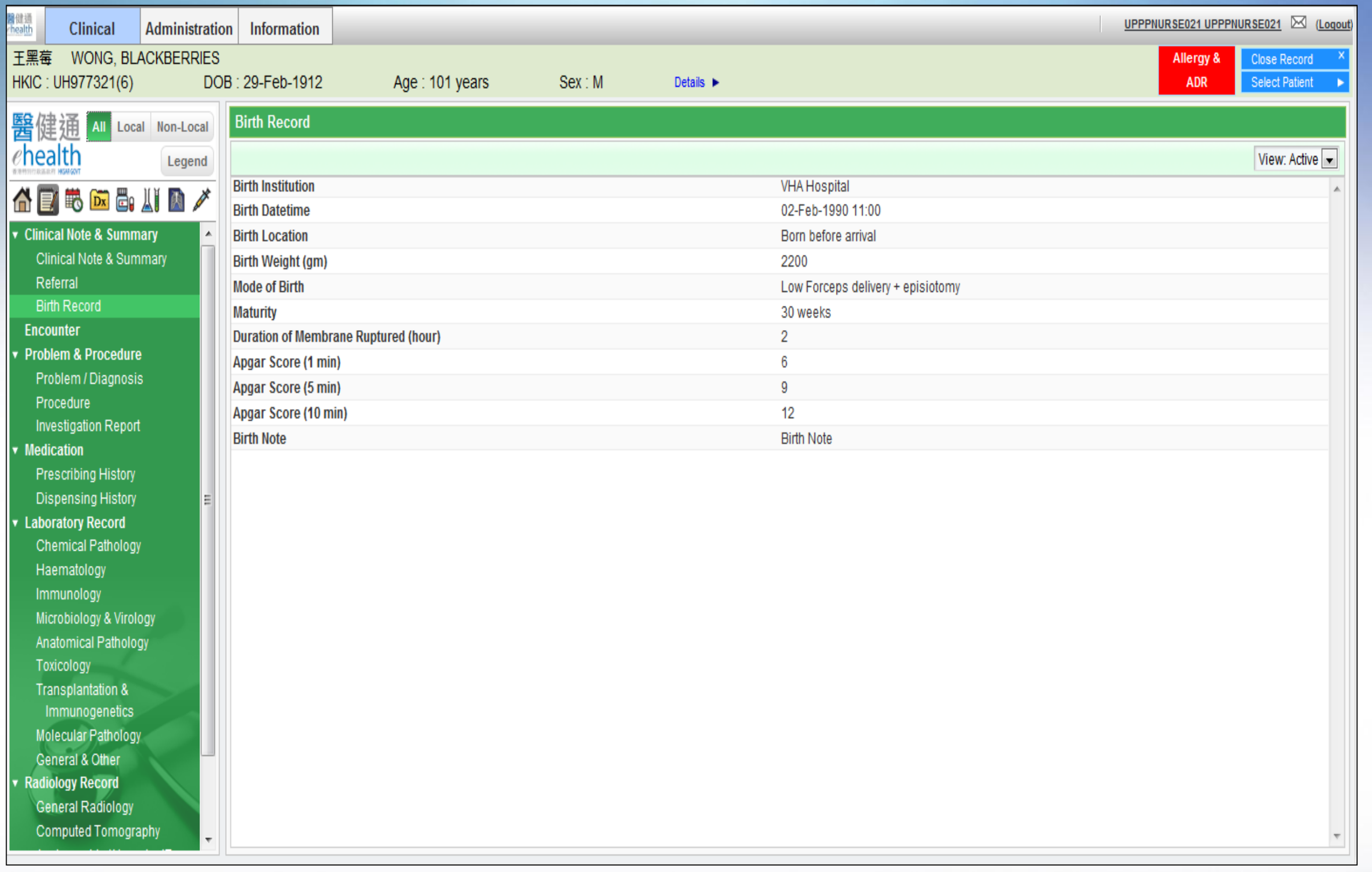
Example – Level 2 (Birth record)

Entity Name	Validation Rule	Data requirement (Certified Level 2)	Example (Certified Level 2)
Birth datetime		M	20/12/2011 21:22
Birth institution local description		M	St. Paul Hospital
Birth location local description		O	Born on arrival
Maturity at birth (week)	Value between 20 to 44	O	36
Maturity at birth (day)	1) Value between 1 and 6	O if [Maturity at birth (week)] is given NA if [Maturity at birth (week)] is blank	1
Mode of birth		O	NSD
Duration of membrane ruptured (hour)		O	3
Apgar score (1 min)	Value within 0 to 10	O	8
Apgar score (5 min)	Value within 0 to 10	O	9
Apgar score (10 min)	Value within 0 to 10	O	10
Birth weight (gm)	Value between 300 to 7000	O	2810
Birth note		O	abc

Example – Level 3 (Birth record)

Entity Name	Validation Rule	Code Table	Data requirement (Certified Level 3)	Example (Certified Level 3)
Birth datetime			M	09/12/2001 23:59
Birth institution code		Birth institution	M	PMH
Birth institution description		Birth institution	M	Princess Margaret Hospital
Birth institution local description			M	Princess Margaret Hospital
Birth location code		Birth location	O	BBA
Birth location description		Birth location	M if [Birth location code] is given NA if [Birth location code] is blank	Born before arrival
Birth location local description			M if [Birth location code] is given NA if [Birth location code] is blank	Born in taxi
Maturity at birth (week)	Value between 20 to 44		O	38
Maturity at birth (day)	1) Value between 1 and 6		O if [Maturity at birth (week)] is given NA if [Maturity at birth (week)] is blank	5
Mode of birth			O	LSCS
Duration of membrane ruptured (hour)			O	2
Apgar score (1 min)	Value within 0 to 10		O	6
Apgar score (5 min)	Value within 0 to 10		O	10
Apgar score (10 min)	Value within 0 to 10		O	10
Birth weight (gm)	Value between 300 to 7000		O	3150
Birth note			O	abc

eHR viewer: Birth record



Related files: Birth record

- Data schema
  - Birth record
- Codex
  - Birth institution
  - Birth location

Data schema: Birth record

Form	Entity Name	Entity ID	Definition	Data Type (code)	Data Type (description)	Validation Rule	Repeated Data	Code Table	Data requirement (Certified Level 1)	Data requirement (Certified Level 2)	Data requirement (Certified Level 3)	Example (Certified Level 1)	Example (Certified Level 2)	Example (Certified Level 3)
Birth Record	Birth datetime	100310	The birth date or birth datetime of a patient	TS	Time stamp				M	M	M	11/02/2012	20/12/2011 21:22	09/12/2001 23:59
Birth Record	Birth institution code	1003346	[eHR value] of the "Birth institution" code table, to define the healthcare institution who reported the birth data to the Immigration Department	CE	Coded element			Birth institution	NA	NA	M			PMH
Birth Record	Birth institution description	1003107	[eHR description] of the "Birth institution" code table, it should be the corresponding description of the selected [Birth institution code]. Birth institution description is to define the healthcare institution who reported the birth data to the Immigration Department.	ST	String			Birth institution	NA	NA	M			Princess Margaret Hospital
Birth Record	Birth institution local description	1003108	The local description of the healthcare institution who reported the birth data to the Immigration Department.	ST	String				M	M	M	St. Paul Hospital	St. Paul Hospital	Princess Margaret Hospital
Birth Record	Birth location code	1003102	[eHR value] of the "Birth location" code table, to define the location where the patient was born	CE	Coded element			Birth location	NA	NA	O			BBA
Birth Record	Birth location description	1003103	[eHR description] of the "Birth location" code table, it should be the corresponding description of the selected [Birth location code]. Birth location description is to define the location where the patient was born.	ST	String			Birth location	NA	NA	M if [Birth location code] is given NA if [Birth location code] is blank			Born before arrival
Birth Record	Birth location local description	1003104	Local description of the location where the patient was born	ST	String				NA	O	M if [Birth location code] is given NA if [Birth location code] is blank		Born on arrival	Born in taxi
Birth Record	Maturity at birth (week)	100308	The maturity in week counted at patient's birth	NM	Numeric	Value between 20 to 44			NA	O	O		36	38
Birth Record	Maturity at birth (day)	1003105	The maturity counted at patient's birth. It is the remaining day of a week of the maturity period at birth. This should be read together with [Maturity at birth (week)].	NM	Numeric	1) Value between 1 and 6			NA	O if [Maturity at birth (week)] is given NA if [Maturity at birth (week)] is blank	O if [Maturity at birth (week)] is given NA if [Maturity at birth (week)] is blank		1	5
Birth Record	Mode of birth	1003901	The method by which the patient was delivered	ST	String				NA	O	O		NSD	LSCS
Birth Record	Duration of membrane ruptured (hour)	100309	The duration measured in hour between rupture of the membranes and labour	NM	Numeric				NA	O	O		3	2
Birth Record	Apgar score (1 min)	100311	The Apgar score taken at 1 minute after birth	NM	Numeric	Value within 0 to 10			NA	O	O		8	6
Birth Record	Apgar score (5 min)	100312	The Apgar score taken at 5 minutes after birth	NM	Numeric	Value within 0 to 10			NA	O	O		9	10
Birth Record	Apgar score (10 min)	100313	The Apgar score taken at 10 minutes after birth	NM	Numeric	Value within 0 to 10			NA	O	O		10	10
Birth Record	Birth weight (gm)	100314	The birth weight in gram (gm)	NM	Numeric	Value between 300 to 7000			NA	O	O		2810	3150
Birth Record	Birth note	1003106	The additional information about the birth of the patient	TX	Text				O	O	O	abc	abc	abc

Codex: Birth institution

Birth Institution

Purpose : To define the healthcare institution where the birth data will be reported to the Immigration Department

Source:

Term ID	eHR Value	eHR Description
	AHN	Alice Ho Miu Ling Nethersole Hospital
	KWH	Kwong Wah Hospital
	PYN	Pamela Youde Nethersole Eastern Hospital
	PWH	Prince of Wales Hospital
	PMH	Princess Margaret Hospital
	QEH	Queen Elizabeth Hospital
	QMH	Queen Mary Hospital
	TYH	Tsan Yuk Hospital
	TMH	Tuen Mun Hospital
	UCH	United Christian Hospital
	CH	Canossa Hospital (Caritas)
	EH	Evangel Hospital
	HKA	Hong Kong Adventist Hospital
	HKBH	Hong Kong Baptist Hospital
	HKC	Hong Kong Central Hospital
	HKS	Hong Kong Sanatorium & Hospital Limited
	MWM	Matilda & War Memorial Hospital
	PBH	Precious Blood Hospital (Caritas)
	UH	Shatin International Medical Centre Union Hospital
	SPH	St. Paul's Hospital
	STH	St. Teresa's Hospital
	TWA	Tsuen Wan Adventist Hospital

Codex: Birth location

Birth Location

Purpose : to indicate the location where the birth was taken place

Source : HA

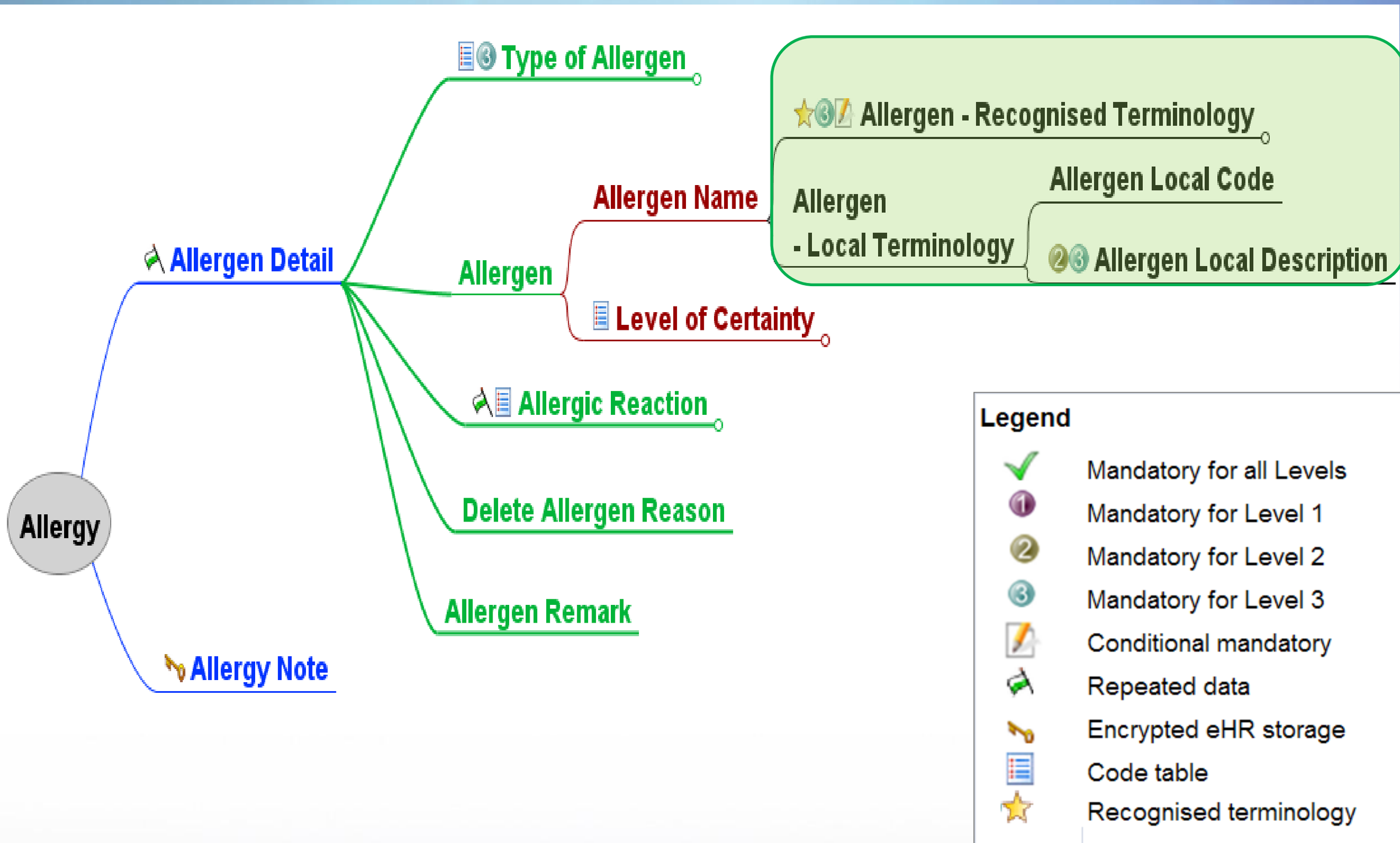
Term ID	eHR Value	eHR Description	Definition
	BBA	Born before arrival	Born before arriving the hospital
	BOA	Born on arrival	Born on arriving the Accident & Emergency Department
	BIH	Born in hospital	Born in hospital

ALLERGY &
ADVERSE DRUG REACTION (ADR)

Allergy & ADR

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

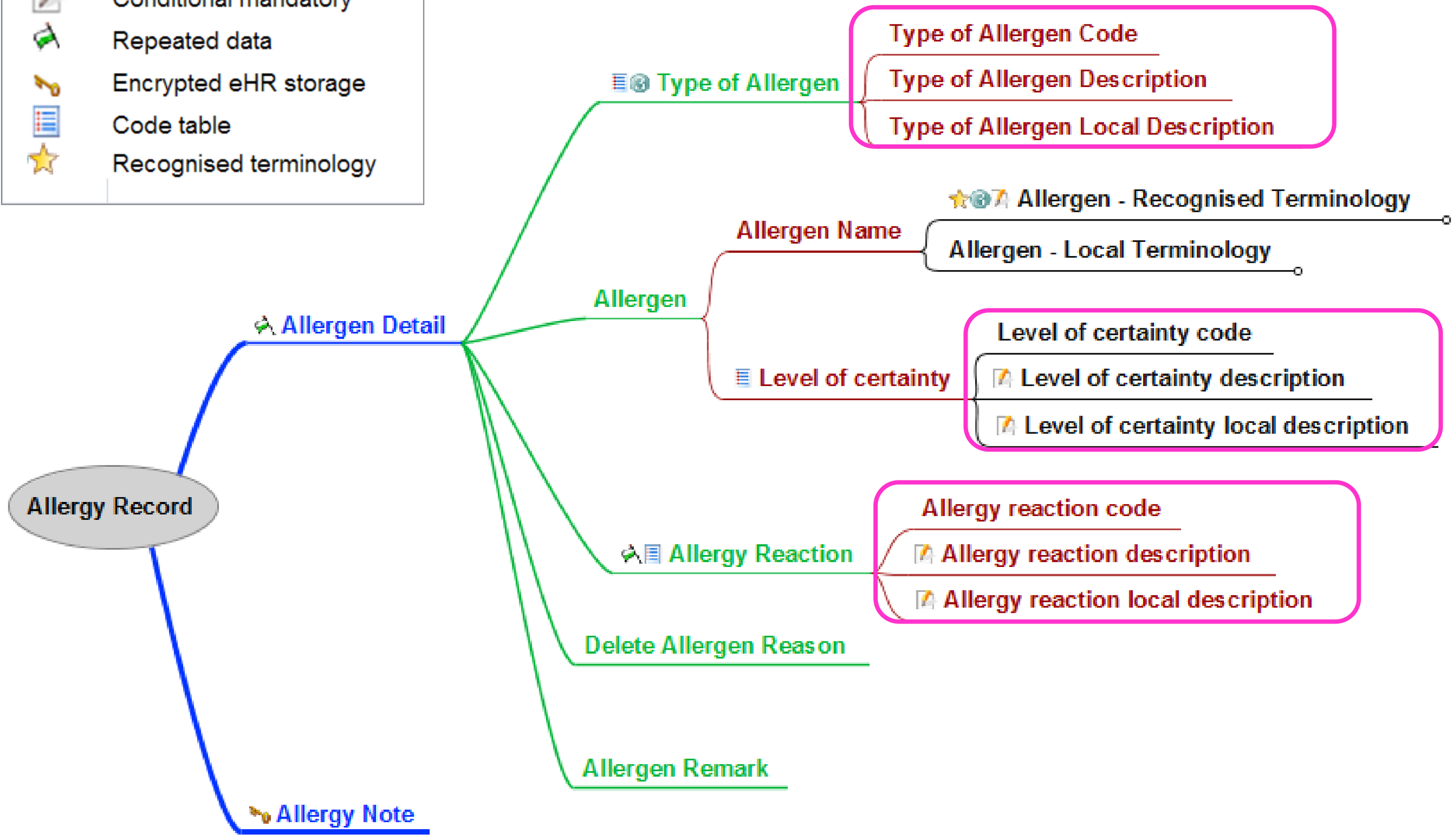
Mind map: Allergy (1)



Mind map: Allergy (2)

Legend

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



Example – Level 2 (Allergy)

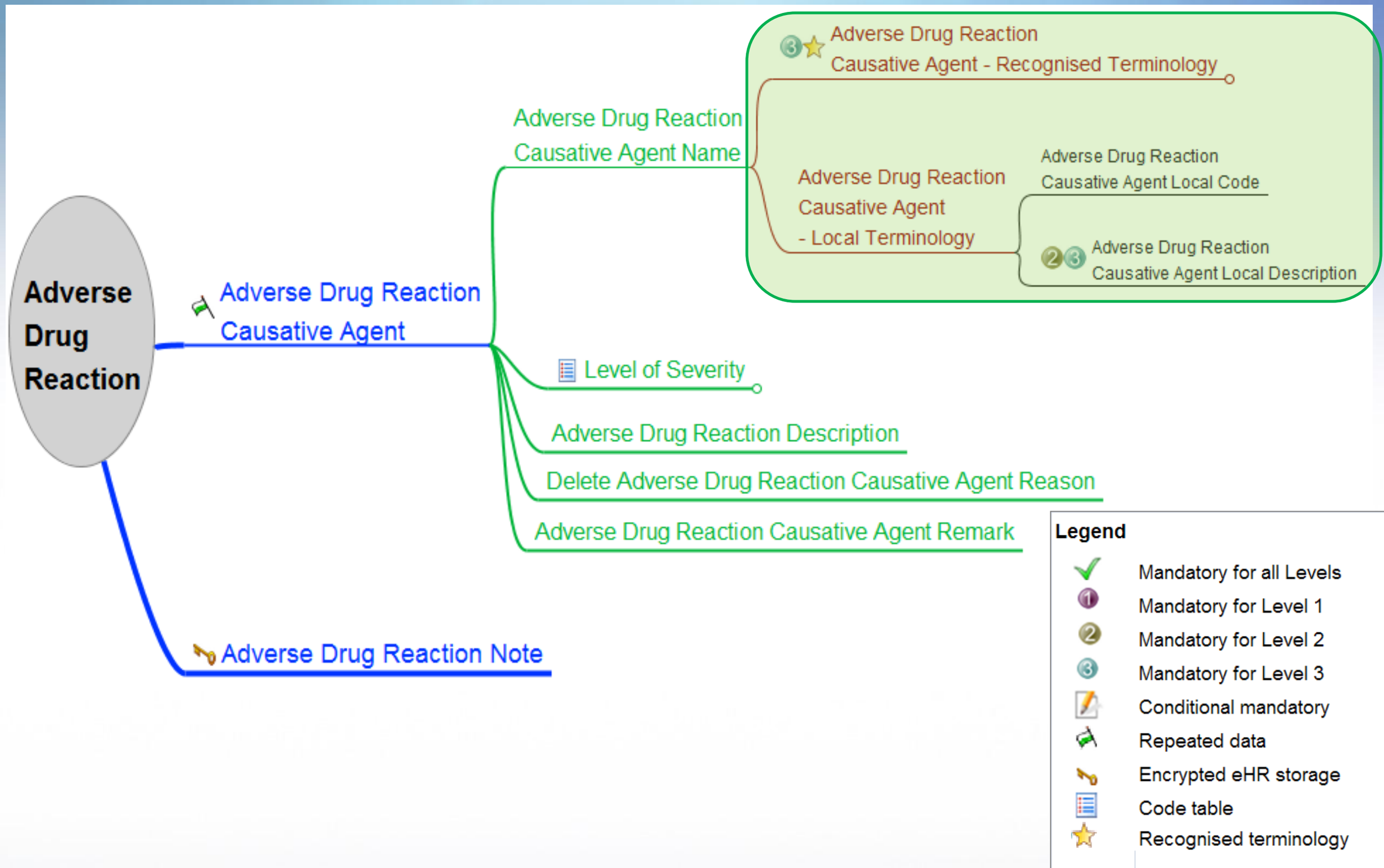
Entity Name	Data requirement (Certified Level 2)	Example (Certified Level 2)
Type of allergen local description	O	Unknown
Allergen local code	O	abc
Allergen local description	M	Fish
Level of certainty local description	O	Not sure
Allergic reaction local description	O	Rash
Delete allergen reason	O	abc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

Example – Level 3 (Allergy)

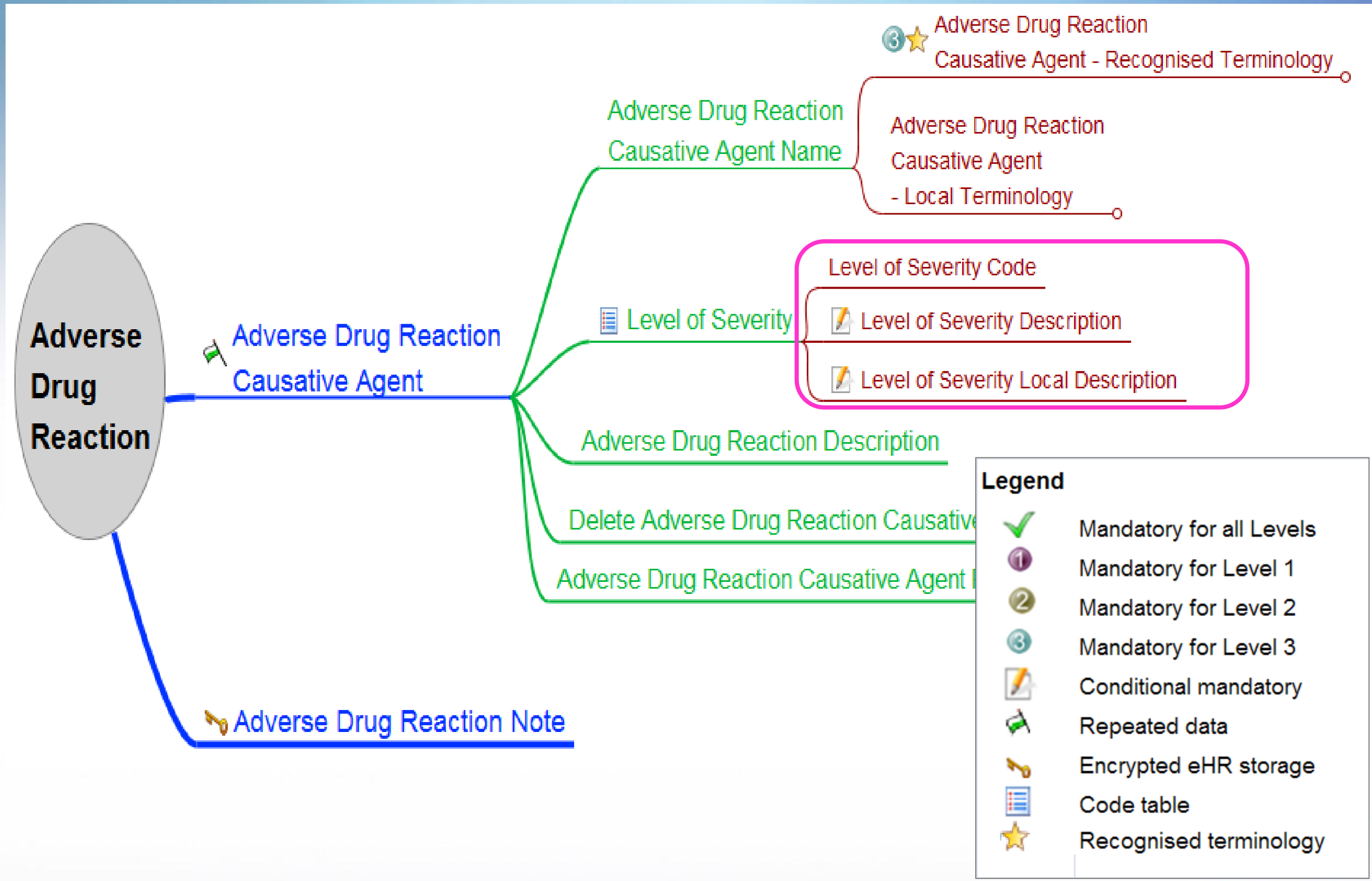
Entity Name	Code Table	Data requirement (Certified Level 3)	Example (Certified Level 3)
Type of allergen code	Type of allergen	M	Drug
Type of allergen description	Type of allergen	M	Drug allergen
Type of allergen local description		M	Drug allergen
Allergen - recognised terminology name	Recognised terminology name - pharmaceutical	M if [Type of allergen cod NA if [Type of allergen code] = "Non-dr	
Allergen identifier - recognised terminology		M if [Type of allergen code] = NA if [Type of allergen code] = "Non-drug"	
Allergen description - recognised terminology		M if [Type of allergen code] NA if [Type of allergen code] = "Non	
Allergen local code		O	a1234
Allergen local description		M	Peni G
Level of certainty code	Allergy level of certainty	O	S
Level of certainty description	Allergy level of certainty	M if [Level of certainty code] is given NA if [Level of certainty code] is blank	Suspected
Level of certainty local description		M if [Level of certainty code] is given O if [Level of certainty code] is blank	Suspected
Allergic reaction code	Allergic reaction	O	2
Allergic reaction description	Allergic reaction	M if [Allergic reaction code] is given NA if [Allergic reaction code] is blank	Allergic rhinitis
Allergic reaction local description		M if [Allergic reaction code] is given O if [Allergic reaction code] is blank	Allergic rhinitis
Delete allergen reason		O	abc
Allergen remark		O	abc
Allergy note		O	abc

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

Mind map: ADR (1)



Mind map: ADR (2)



Example – Level 2 (ADR)

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

Example – Level 3 (ADR)

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

eHR viewer: Allergy & ADR

Clinical | Administration | Information

UPPPNURSE021 UPPPNURSE021 (Logout)

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

Allergy & ADR | Close Record | Select Patient

醫健通 ehealth — All | Local | Non-Local | Legend

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

Allergy & Adverse Drug Reaction Details

Participant's all Allergy and ADR information is displayed. View: Active

Allergen	Allergy Information	Date	Institution
▼ DOXYCYCLINE			
VIBRAMYCIN	Certain,Esophagitis	12-Feb-2012	VUC4_A
DOXY-100	Certain,Esophagitis	04-Feb-2012	VUC4_A
DOXYCYCLINE HYCLATE		2-Dec-2011	VUC4_A
AUGMENTIN	Certain,Rash	23-Dec-2011	VHA
PENICILLIN	Suspected,Manifestation uncertain, neck stiffness with penicillin	22-Dec-2011	VUC4_B

Allergen Type: Drug Allergen
Allergen Remark: Hottness of body, Facial swelling

ADR Causative Agent	ADR Information	Date	Institution
▼ DICLOFENAC			
DICLOFENAC SODIUM	Severe,Urticaria	05-May-2012	VUC4_A
VOLTAREN	Mild,Skin Rash	04-Mar-2012	VUC4_B
▼ METHYLDOPA			
ALDOMET [METHYLDOPA]	Mild,Drowsiness	03-Jan-2012	VUC4_B
ALDOMET [METHYLDOPA]	Mild,Drowsiness	03-Jan-2012	VHA
NATRILIX [INDAPAMIDE]	Mild,Hypokalemia,Hyponatremia	23-Dec-2011	VUC4_A
RAMIPRIL	Mild,Acute Renal Disease, facial rash with itchiness without swelling reported	22-Dec-2011	VHA

Related files: Allergy / ADR

- Data schema
  - Allergy
- Codex
  1. Type of allergen
  2. Recognised terminology name – pharmaceutical product
  3. Allergy level of certainty
  4. Allergic reaction

- Data schema
  - Adverse drug reaction
- Codex
  1. Recognised terminology name – pharmaceutical product
  2. ADR severity level

Next Domain

Data schema: Allergy

Form	Entity Name	Definition	Data Type (code)	Data Type (description	Validation Rule	Repeated Data	Code Table	Data requirement (Certified Level 2)	Data requirement (Certified Level 3)	Example (Certified Level 2)	Example (Certified Level 3)
Allergy	Type of allergen code	[eHR value] of the "Type of allergen" code table. Type of allergen is to indicate whether the allergen is drug related or	CE	Coded element		R	Type of allergen	NA	M		Drug
Allergy	Type of allergen description	[eHR description] of the "Type of allergen" code table. It should be the corresponding description of the selected	ST	String		R	Type of allergen	NA	M		Drug allergen
Allergy	Type of allergen local description	Local description created by the healthcare provider for reporting the type of allergen. Type of allergen is to indicate	ST	String		R		O	M	Unknown	Drug allergen
Allergy	Allergen - recognised terminology name	Name of the recognised terminology set for the reported allergen	CE	Coded element	If eHR value = HKCTT, allowable nature is "Pharmaceutical product" ~~if eHR value = SNOMED CT, allowable hierarchy is "Pharmaceutical /~~	R	Recognised terminology name - pharmaceutical	NA	M if [Type of allergen code] = "Drug" NA if [Type of allergen code] = "Non-drug" and "Unclassify"		HKCTT
Allergy	Allergen identifier - recognised terminology	Unique identifier in the recognised terminology for the reported allergen	CE	Coded element	[Allergen identifier - recognised terminology] should be included in the selected recognised terminology of the "Recognised terminology name	R		NA	M if [Type of allergen code] = "Drug" NA if [Type of allergen code] = "Non-drug" and "Unclassify"		234556
Allergy	Allergen description - recognised terminology	Description in the recognised terminology for the reported allergen	CE	Coded element	[Allergen description - recognised terminology] should be matched with the corresponding description of the selected [Allergen identifier -	R		NA	M if [Type of allergen code] = "Drug" NA if [Type of allergen code] = "Non-drug" and "Unclassify"		Panadol (paracetamol) oral tablet 500 mg
Allergy	Allergen local code	Local code created by the healthcare provider for the reported allergen	ST	String		R		O	O	abc	a1234
Allergy	Allergen local description	Local description created by the healthcare provider for the reported allergen	ST	String		R		M	M	Fish	Peni G
Allergy	Level of certainty code	[eHR value] of the "Allergy level of certainty" code table for identifying the level of certainty of an allergen which caused an	CE	Coded element		R	Allergy level of certainty	NA	O		S
Allergy	Level of certainty description	[eHR description] of the "Allergy level of certainty" code table for identifying the level of certainty of an allergen which caused an	ST	String		R	Allergy level of certainty	NA	M if [Level of certainty code] is given NA if [Level of certainty code] is blank		Suspected
Allergy	Level of certainty local description	Local description created by the healthcare provider for the level of certainty of an allergen which caused an allergic	ST	String		R		O	M if [Level of certainty code] is given O if [Level of certainty code] is blank	Not sure	Suspected
Allergy	Allergic reaction code	[eHR value] of the "Allergic reaction" code table which includes the common hypersensitivity response of the	CE	Coded element		R	Allergic reaction	NA	O		2
Allergy	Allergic reaction description	[eHR description] of the "Allergic reaction" code table, which includes the common hypersensitivity response of the	ST	String		R	Allergic reaction	NA	M if [Allergic reaction code] is given NA if [Allergic reaction code] is blank		Allergic rhinitis
Allergy	Allergic reaction local description	Local description created by the healthcare provider for the allergic reaction	ST	String		R		O	M if [Allergic reaction code] is given O if [Allergic reaction code] is blank	Rash	Allergic rhinitis
Allergy	Delete allergen reason	Reason for deleting a reported allergen	ST	String		R		O	O	abc	abc
Allergy	Allergen remark	Additional information about the allergen	ST	String		R		O	O	abc	abc
Allergy	Allergy note	The additional information about the allergy record	ST	String				O	O	abc	abc

Data schema: ADR

Form	Entity Name	Entity ID	Definition	Data Type (code)	Data Type (description)	Validation Rule	Repeated Data	Code Table	Data requirement (Certified Level 2)	Data requirement (Certified Level 3)	Example (Certified Level 2)	Example (Certified Level 3)
Adverse Drug Reaction	Adverse drug reaction causative agent - recognised terminology name	1003149	Name of the recognised terminology set for the reported adverse drug reaction causative agent	CE	Coded element	If eHR value = HKCTT, allowable nature is "Pharmaceutical product"~~, if eHR value = SNOMED CT, allowable hierarchy is "Pharmaceutical / biologic product"~~	R	Recognised terminology name - pharmaceutical product	NA	M		HKCTT
Adverse Drug Reaction	Adverse drug reaction causative agent identifier - recognised terminology	1003150	Unique identifier in the recognised terminology for the reported adverse drug reaction causative agent	CE	Coded element	[Causative agent identifier - recognised terminology] should be included in the selected recognised terminology of the "Recognised terminology name - pharmaceutical product" code table	R		NA	M		12345
Adverse Drug Reaction	Adverse drug reaction causative agent description - recognised terminology	1003151	Description in the recognised terminology for the reported adverse drug reaction causative agent	CE	Coded element	[Causative agent description - recognised terminology] should be matched with the corresponding description of the selected [Causative agent identifier - recognised terminology]	R		NA	M		Penicillin
Adverse Drug Reaction	Adverse drug reaction causative agent local code	1003152	Local code created by the healthcare provider for the reported adverse drug reaction causative agent	ST	String		R		O	O	258	258
Adverse Drug Reaction	Adverse drug reaction causative agent local description	1003153	Local description developed by the healthcare organisation for the reported adverse drug reaction causative agent	ST	String		R		M	M	Peni	Pen
Adverse Drug Reaction	Level of severity code	1003158	[eHR value] of the "Adverse drug reaction severity level" code table. Adverse drug reaction severity level is the severity level of the adverse drug reaction.	CE	Coded element		R	Adverse drug reaction severity level	NA	O		M
Adverse Drug Reaction	Level of severity description	1003159	[eHR description] of the "Adverse drug reaction severity level" code table, it should be the corresponding description of the selected [Level of severity code]. Adverse drug reaction severity level is the severity level of the adverse drug reaction.	ST	String		R	Adverse drug reaction severity level	NA	M if [Level of severity code] is given NA if [Level of severity code] is blank		Mild
Adverse Drug Reaction	Level of severity local description	1003160	Local description created by the healthcare provider for the severity level of the adverse drug reaction	ST	String		R		O	M if [Level of severity code] is given O if [Level of severity code] is blank	mod	Moderate
Adverse Drug Reaction	Adverse drug reaction description	1003156	Description of the adverse drug reaction	ST	String		R		O	O	Skin rash	Angioedema
Adverse Drug Reaction	Delete adverse drug reaction causative agent reason	1003165	Reason for deleting a reported adverse drug reaction causative agent	ST	String		R		O	O	error due to wrong patient	mixing patient entry
Adverse Drug Reaction	Adverse drug reaction causative agent remark	1003166	The additional information about the causative agent of adverse drug reaction	ST	String		R		O	O	abc	abc
Adverse Drug Reaction	Adverse drug reaction note	1003167	The additional information about the adverse drug reaction record as a whole	ST	String				O	O	abc	abc

Codex:
Type of allergen

Type of Allergen

Purpose: to define the type of allergen

Source:

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

Codex:
RT name – pharmaceutical product

Recognised Terminology Name - Pharmaceutical Product

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

Term ID	eHR Value	eHR Description	Allowable Values
	HKCTT	Hong Kong Clinical Terminology Table	Nature = Pharmaceutical Products
	RPP	Registered Pharmaceutical Products	All values
	~~SNOMED CT~~	~~Systematized Nomenclature of Medicine - Clinical Terms~~	~~Hierarchy – Pharmaceutical / biologic product~~

Updated on 10/7 2013

Codex:
Allergy level of certainty

Allergy level of certainty

Purpose: to define the certainty of the allergy

Souce: e-HR

Term ID	eHR Value	eHR Description
	S	Suspected
	C	Certain

Codex: Allergic reaction

Allergic Reaction
Purpose: to define the allergic reaction
Souce: HA

Term ID	eHR Value	eHR Description
	1	Allergic contact dermatitis
	2	Allergic rhinitis
	3	Anaphylaxis
	4	Angioedema
	5	Aplastic anaemia
	6	Asthma
	7	Atopic dermatitis
	8	Cholestasis
	9	Eczema
	10	Erythema multiforme
	11	Erythema nodosum
	12	Erythroderma
	13	Exfoliative dermatitis
	14	Fever
	15	Fibrosing alveolitis
	16	Fixed eruptions
	17	Generalised liver damage
	18	Haemolytic anaemia
	19	Photosensitivity
	20	Pruritis
	21	Rash
	22	Serum sickness
	23	Stevens-Johnson Syndrome
	24	Toxic erythema
	25	Urticaria
	26	Other allergy reaction
	27	Manifestation uncertain

Codex:
ADR severity level

Adverse Drug Reaction Severity Level

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

Reference: HA

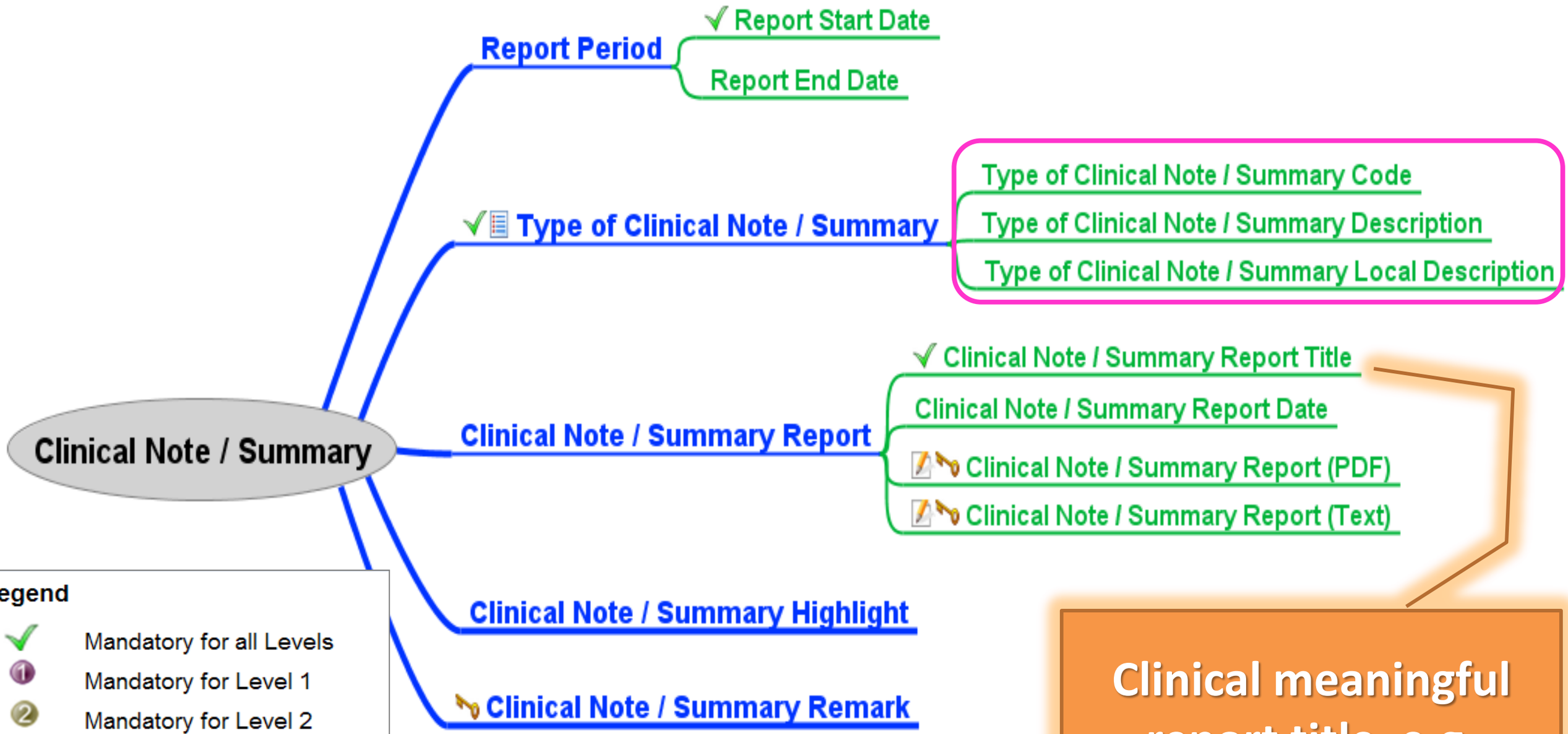
Term ID	eHR Value	eHR Description
	M	Mild
	S	Severe

CLINICAL NOTE / SUMMARY

Clinical note / summary

- Contains information that record/summarize the followings of a **particular clinical encounter/episode**:
  - **Reason** originates the encounter/episode & the **healthcare recipient's condition** during initial encounter
  - **ADR, allergies and clinical alert** found during the encounter/episode
    - *these info should also be separately sent to the eHR as the appropriate section*
  - **Major diagnostic findings** during the course of the episode
  - **Problems** identified
  - **Significant procedures** performed & other related **therapeutic treatment**, e.g. medication
  - **Healthcare recipient's condition, therapeutic orders or treatment plan** for that encounter or while preparing a periodic episode summary or upon termination of an episode
  - **FU** arrangement
  - **Education** to the eHR participant / family, if applicable
- **Level 1 data only**

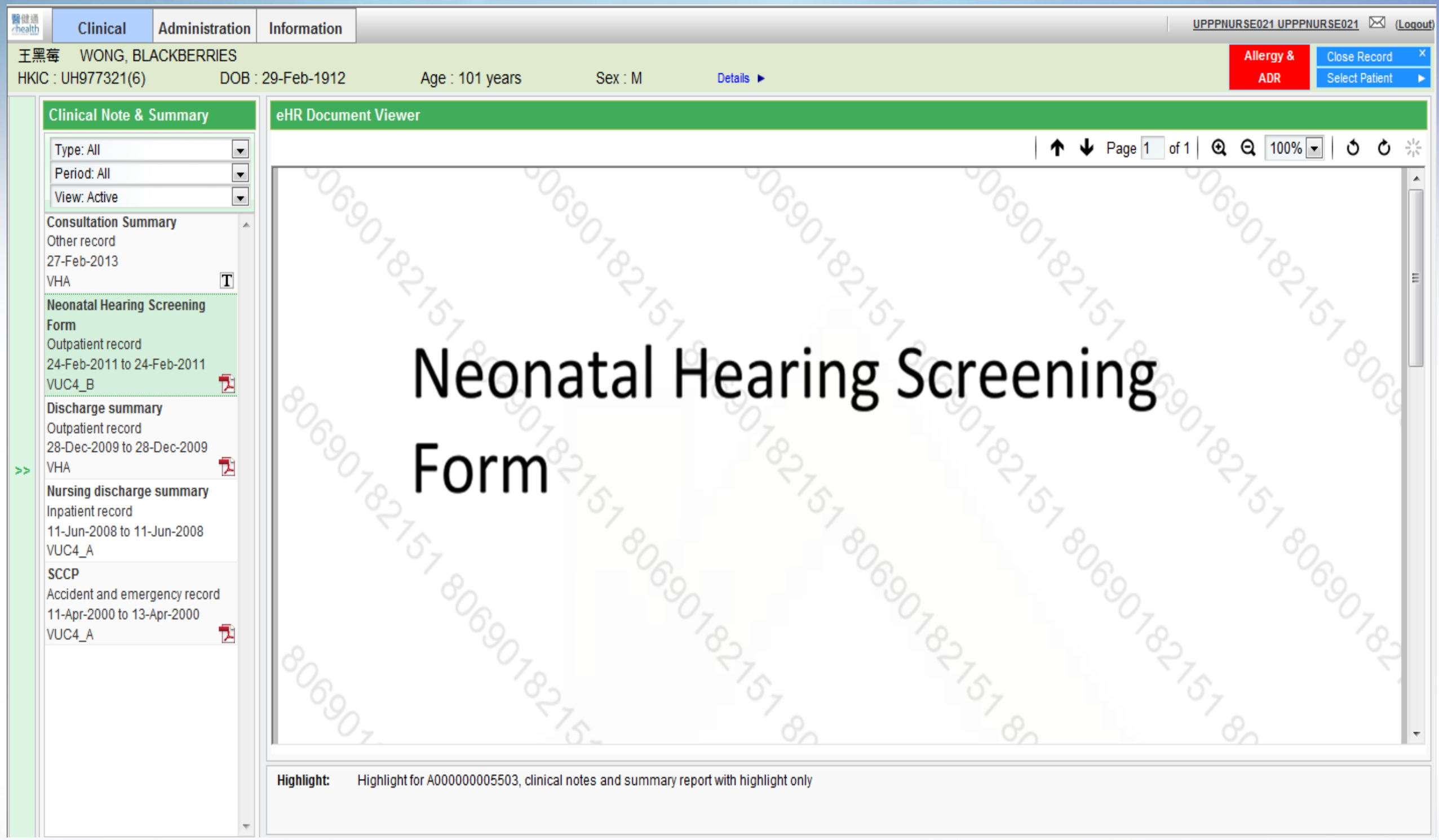
Mind map: Clinical note/summary



Example – Level 1 (Clinical note / summary)

Entity Name	Code Table	Data requirement (Certified Level 1)	Example (Certified Level 1)
Report start date		M	2010/12/9
Report end date		O	16/09/2010
Type of clinical note / summary code	Type of clinical note /	M	IP
Type of clinical note / summary description	Type of clinical note /	M	In-patient record
Type of clinical note / summary local description		M	Hospitalisation record
Clinical note / summary report title		M	Discharge summary
Clinical note / summary report date		O	2012/2/1
Clinical note / summary report (PDF)		M if [Clinical note / summary report (Text)] is blank	
Clinical note / summary report (Text)		M if [Clinical note / summary report (PDF)] is blank	
Clinical note / summary highlight		O	Fever for Ix
Clinical note / summary remark		O	abc

eHR viewer:
Clinical note / summary



Related Files:
Clinical note / summary

- Data schema
  - Clinical note / summary

- Codex
  - Type of clinical note / summary

Data schema: Clinical note / summary

Form	Entity Name	Entity ID	Definition	Data Type (code)	Data Type (description)	Validation Rule	Repeated Data	Code Table	Data requirement (Certified Level 1)	Example (Certified Level 1)
Clinical Note / Summary	Report start date	1003347	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.	TS	Time stamp				M	2010/12/9
Clinical Note / Summary	Report end date	1003348	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.	TS	Time stamp	Not earlier than the [Report start date]			O	16/09/2010
Clinical Note / Summary	Type of clinical note / summary code	1003349	[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.	CE	Coded element			Type of clinical note / summary	M	IP
Clinical Note / Summary	Type of clinical note / summary description	1003350	[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.	ST	String			Type of clinical note / summary	M	In-patient record
Clinical Note / Summary	Type of clinical note / summary local description	1003351	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.	ST	String				M	Hospitalisation record
Clinical Note / Summary	Clinical note / summary report title	1003352	Report title of the clinical note / summary	ST	String				M	Discharge summary
Clinical Note / Summary	Clinical note / summary report date	1003353	The documentation date of the clinical note / summary report. If this documentation date is not available, use the report creation date	TS	Time stamp				O	2012/2/1
Clinical Note / Summary	Clinical note / summary report (PDF)	1003354	Clinical note / summary report in Portable Document Format (PDF)	ED	Encapsulated data				M if [Clinical note / summary report (Text)] is blank	
Clinical Note / Summary	Clinical note / summary report (Text)	1003355	Clinical note / summary report in text format	TX	Text				M if [Clinical note / summary report (PDF)] is blank	
Clinical Note / Summary	Clinical note / summary highlight	1003356	Summary of important information for the clinical note / summary, e.g. important findings	ST	String				O	Fever for Ix
Clinical Note / Summary	Clinical note / summary remark	1003357	The additional information about the clinical note / summary	TX	Text				O	abc

Codex:
Type of clinical note / summary

Type of clinical note / summary
Purpose : To indicate type of clinical note / summary
Source : HA ePR

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

INVESTIGATION REPORT

Investigation report

- Other than laboratory and radiology diagnostics tests, **other various types of diagnostic reports** would be fallen into this domain, for examples:
  - ***Audiogram, Ambulatory BP monitoring, Echocardiogram, Treadmill, Holter, PFT, EEG, EMG, ESWL, ETT …***

- **Level 1 data only**

Mind map: Investigation report

Clinical meaningful report title, e.g. Pulmonary function test report

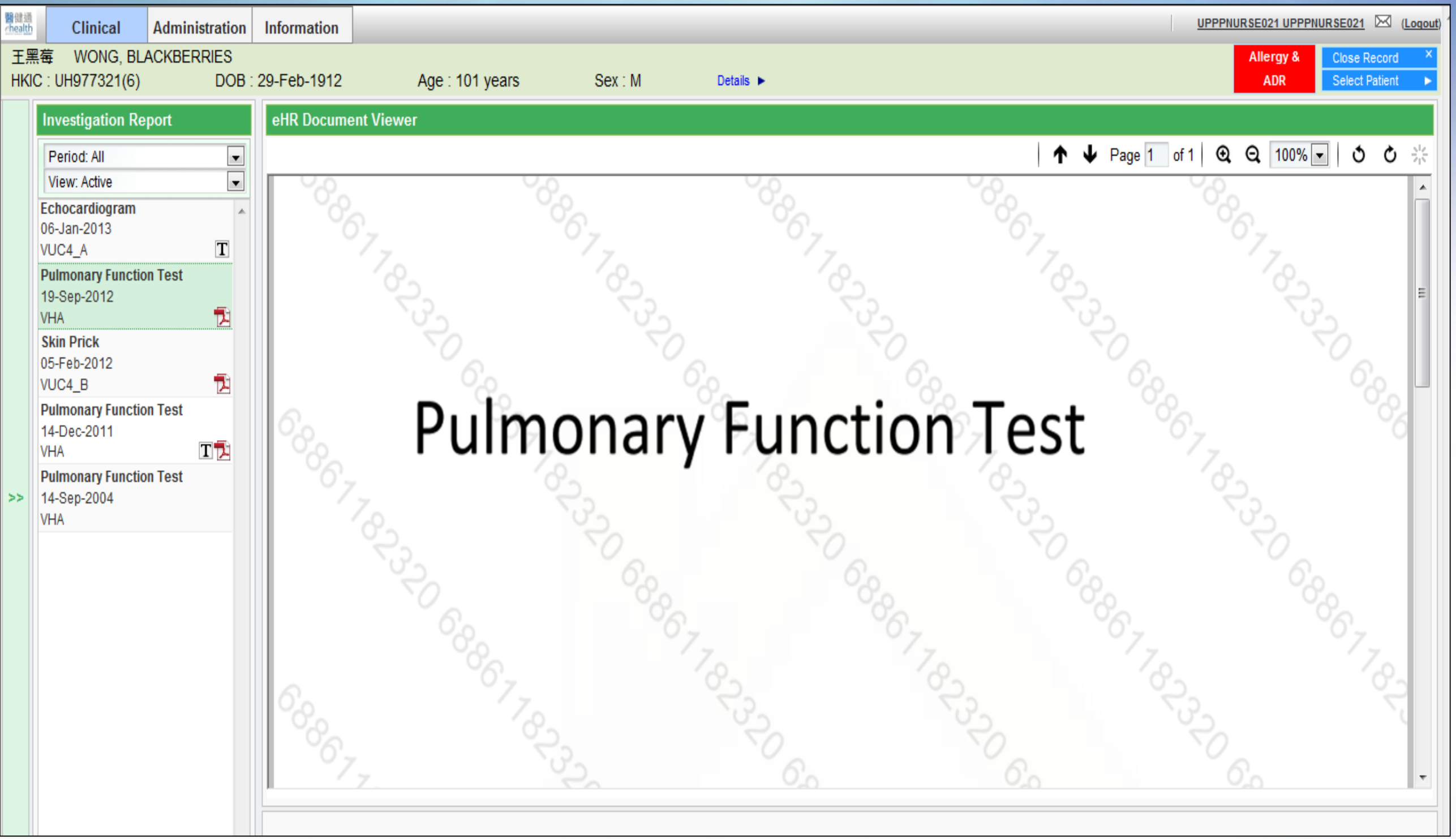
Legend

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

Example – Level 1 (Investigation report)

Entity Name	Data requirement (Certified Level 1)	Example (Certified Level 1)
Investigation report reference date	M	2/1/2012
Investigation report title	M	Echocardiogram Report
Investigation report (PDF)	M if [Investigation report (Text)] is blank	
Investigation report report (Text)	M if [Investigation report (PDF)] is blank	
Investigation report highlight	O	Cardiac
Investigation report remark	O	abc

eHR viewer:
Investigation report



Related file: Investigation report

- Data schema
  - Investigation report

Data schema: Investigation report

Form	Entity Name	Entity ID	Definition	Data Type (code)	Data Type (description)	Validation Rule	Repeated Data	Code Table	Data requirement (Certified Level 1)	Example (Certified Level 1)
Investigation Report	Investigation report reference date	1003589	The date when the investigation was performed. If the investigation date is not available, use the report creation date.	TS	Time stamp				M	2012/2/1
Investigation Report	Investigation report title	1003590	The title of the investigation report	ST	String				M	Echocardiogram Report
Investigation Report	Investigation report (PDF)	1003591	Investigation report in Portable Document Format (PDF)	ED	Encapsulated data				M if [Investigation report (Text)] is blank	
Investigation Report	Investigation report report (Text)	1003592	Investigation report in text format	TX	Text				M if [Investigation report (PDF)] is blank	
Investigation Report	Investigation report highlight	1003593	Summary of important information for the investigation report, e.g. important findings	ST	String				O	Cardiac
Investigation Report	Investigation report remark	1003594	The additional information about the investigation report	TX	Text				O	abc

THANK YOU