

Seminar on Recognised Terminology – Hong Kong
Clinical Terminology Table (HKCTT)

Transmitting patient data to eHRSS

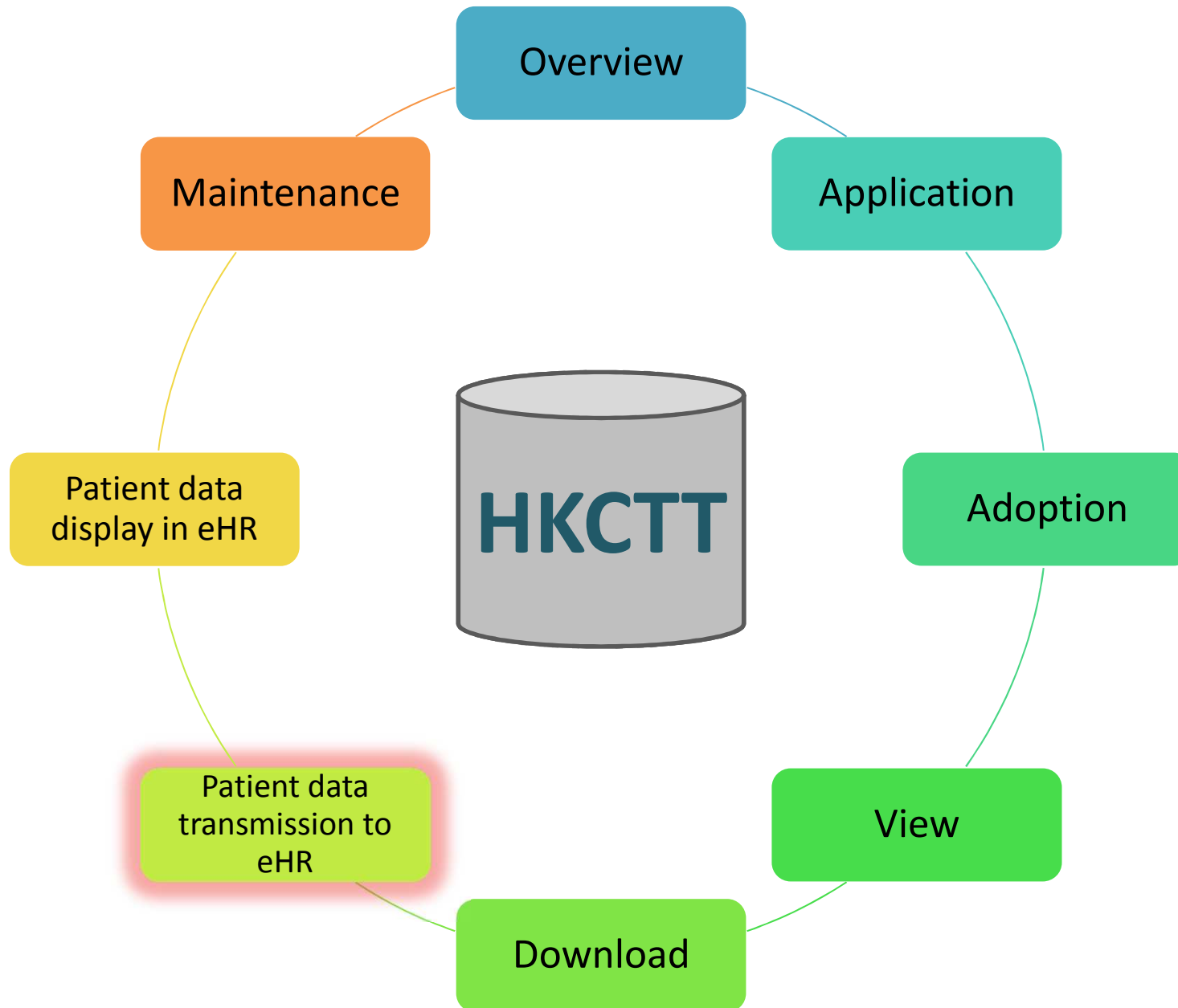
Austen WONG

Health Informatics Analyst

eHR Information Standard Office

16 April 2014

Terminology for eHR - HKCTT



Outline

- Content domain
 - Problem
 - Procedure
- Data compliance level
- Level 3 data validation

eHR Content Domain

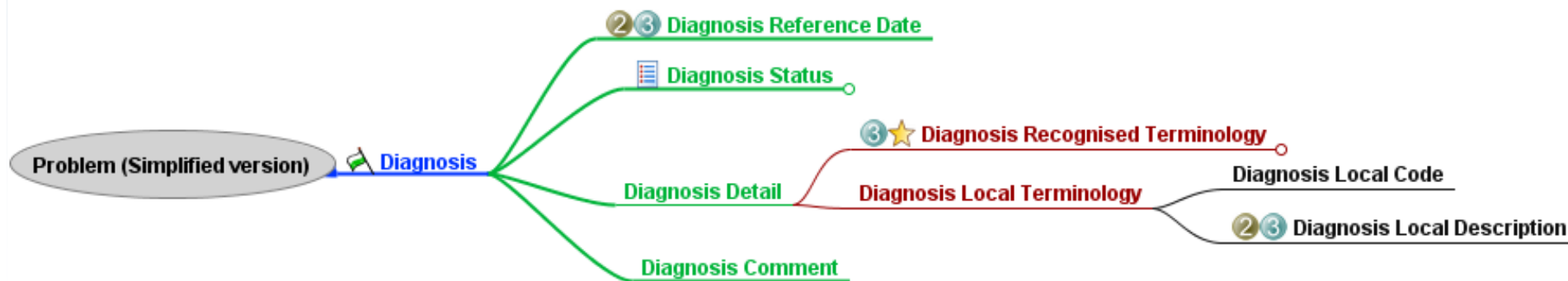
PROBLEM



Problem

- Can be
 - diagnosis
 - social issue
 - risk factor
 - allergy
 - significant abnormal physical sign and examination finding
 - pathophysiological state
 - reactions to food or drugs
 - health alert
- Problem list includes all active and inactive significant health and social problems
- **No** free text data or data in PDF will be accepted

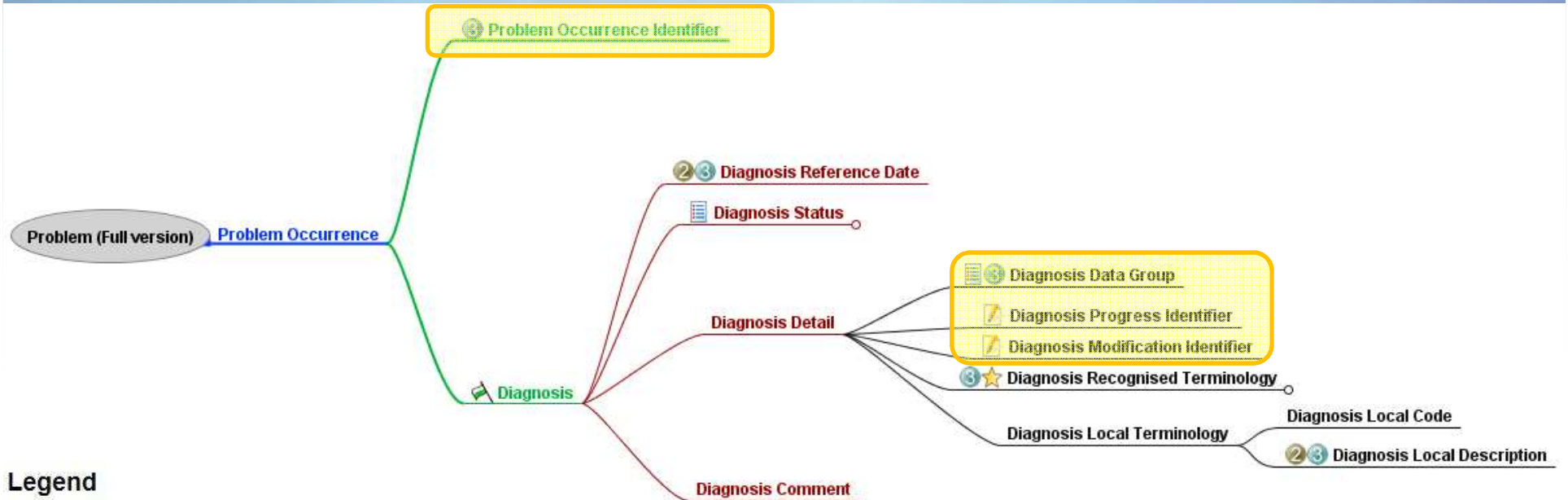
Mindmap – Problem (Simplified Version)



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

Mindmap – Problem (Full Version)



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 for Problem – Level 2

Entity Name	Data requirement (Certified Level 2)	Example (Certified Level 2)
Diagnosis reference date	M	6/12/2010
Diagnosis local code	O	332
Diagnosis local description	M	Transient ischaemic attack - TIA
Diagnosis comment	O	affect left side of body



Example for Problem – Level 3

Entity Name	Data requirement (Certified Level 3)	Example (Certified Level 3)
Diagnosis reference date	M	6/12/2010
Diagnosis status code ★	O	C
Diagnosis status description ★	M if [Diagnosis status code] is given; NA if [Diagnosis status code] is blank	Cancelled
Diagnosis status local description ★	M if [Diagnosis status code] is given; NA if [Diagnosis status code] is blank	Wrong
Reason for cancellation of diagnosis ★	O if [Diagnosis status code] is "C" ; NA if [Diagnosis status code] is not "C"	Wrong diagnosis as no evidence supported that patient has this condition
Diagnosis -recognised terminology name ★	M	HKCTT
Diagnosis identifier - recognised terminology ★	M	1234
Diagnosis description - recognised terminology ★	M	Transient ischaemic attack
Diagnosis local code	O	332
Diagnosis local description	M	Transient ischaemic attack - TIA
Diagnosis comment	O	affect left side of body





Codex – Diagnosis Status

eHR Sharable Data - Codex: Diagnosis Status

Diagnosis Status

Purpose : to indicate the status of the diagnosis

Source : HA

Term ID	eHR Value	eHR Description
	P	Provisional
	A	Active
	I	Inactive
	R	Resolved
	C	Cancelled



Codex – Recognised Terminology Name (Problem)

eHR Sharable Data - Codex: Recognised Terminology Name - Problem

Recognised terminology name - problem

Purpose: To define the names of the recognised terminology for problem

Reference: eHR

Term ID	eHR Value	eHR Description	Allowable Values
	HKCTT	Hong Kong Clinical Terminology Table	Nature= Diagnosis
	SNOMED CT	Systematized Nomenclature of Medicine - Clinical Terms	Hierarchy = Clinical finding, Situation
	ICD10-2001	International Statistical Classification of Diseases and Related Health Problems Tenth Revision (2001)	Valid ICD 10 codes
	ICD10-2010	International Statistical Classification of Diseases and Related Health Problems Tenth Revision (2010)	Valid ICD 10 codes
	ICD10-MBD	ICD-10 Mental and Behavioural Disorders: Clinical descriptions and diagnostic guidelines	Valid ICD 10 MBD codes
	ICPC2	International Classification for Primary Care, Second edition	Valid ICPC2 codes - excluding those with last 2 digits in the range of 30-69

1. 3 /4 /5-digit codes are accepted
2. Symbols (* / +) are not accepted

Data Schema – Problem (Simplified Version)

Form	Entity Name	Entity ID	Definition	Data Type (code)	Data Type (description)	Validation Rule	Repeated Data	Code Table	Data Type in IAMS	Data requirement (Certified Level 1)	Data requirement (Certified Level 2)	Data requirement (Certified Level 3)	Example (Certified Level 1)	Example (Certified Level 2)	Example (Certified Level 3)
Problem (Simplified version)	Diagnosis reference date	1003578	Date when the diagnosis was created. For eHR, if this date is not available, the last update date of the diagnosis should be used when submitting data to the eHR	TS	Time Stamp		R		Date/Time	NA	M	M		6/12/2010	6/12/2010
Problem (Simplified version)	Diagnosis status code	1003579	[eHR value] of the "Diagnosis status" code table which is used to identify the status of a reported diagnosis	CE	Coded Element		R	Diagnosis status	CE	NA	NA	O			C
Problem (Simplified version)	Diagnosis status description	1003580	[eHR description] of the "Diagnosis status" code table which is used to identify the status of a reported diagnosis. The [Diagnosis status description] should be the corresponding description of the selected [Diagnosis status code]	ST	String		R	Diagnosis status	ST	NA	NA	M if [Diagnosis status code] is given; NA if [Diagnosis status code] is blank			Canceled
Problem (Simplified version)	Diagnosis status local description	1003581	Local description of the diagnosis status	ST	String		R		ST	NA	NA	M if [Diagnosis status code] is given; NA if [Diagnosis status code] is blank			Wrong
Problem (Simplified version)	Reason for cancellation of diagnosis	1003582	The stated reason for cancelling the diagnosis	ST	String		R		ST	NA	NA	O if [Diagnosis Status Code] is "C"; NA if [Diagnosis Status Code] is not "C"			Wrong diagnosis as no evidence supported that patient has this condition
Problem (Simplified version)	Diagnosis - recognised terminology name	1003583	Name of the recognised terminology / classification from which the diagnosis is referenced to	CE	Coded Element	If eHR value=1(HKCTT, Nature must be Diagnosis; 2)SNOMED CT, Clinical Finding or Situation with Explicit Context are allowed; 3)ICD10 & ICD10 MBD, all items are allowed; 4)CPC2, all codes except those ended in range 30-69 are allowed.	R	Recognised terminology name - problem	CE	NA	NA	M			HKCTT
Problem (Simplified version)	Diagnosis identifier recognised terminology	1003584	Unique identifier of the reported diagnosis in the recognised terminology	CE	Coded Element	It should be included in the selected terminology of the "Recognised terminology name - Problem" code table: 1)HKCTT should be TermID; 2)SNOMED CT should be ConceptID; 3)CPC2, ICD10 & ICD10 MBD should be code	R		DE	NA	NA	M			1234
Problem (Simplified version)	Diagnosis description - recognised terminology	1003585	The description of the reported diagnosis in the recognised terminology. It should be the corresponding description of the selected [Diagnosis identifier - recognised terminology].	CE	Coded Element	The description of the selected [Diagnosis identifier - recognised terminology] should be matched as: 1)HKCTT should be eHR description; 2)SNOMED CT should be Preferred term; 3)ICD10 & ICD10 MBD should be Full name; 4)CPC2 should be Full description	R		DE	NA	NA	M			Transient ischaemic attack
Problem (Simplified version)	Diagnosis local code	1003586	Local code created by the healthcare provider for the reported diagnosis	ST	String		R		ST	NA	O	O		332	332
Problem (Simplified version)	Diagnosis local description	1003587	Local description created by the healthcare provider for the reported diagnosis	ST	String		R		ST	NA	M	M		Transient Ischaemic attack - TIA	Transient Ischaemic attack - TIA
Problem (Simplified version)	Diagnosis comment	1003588	Comment made on the reported diagnosis	ST	String		R		ST	NA	O	O		affect left side of body	affect left side of body

eHR Content Domain

PROCEDURE



Procedure

- Can be any significant procedures that are performed for
 - Diagnostic
 - Exploratory
 - Treatment purposes
- **No** free text data or data in PDF will be accepted

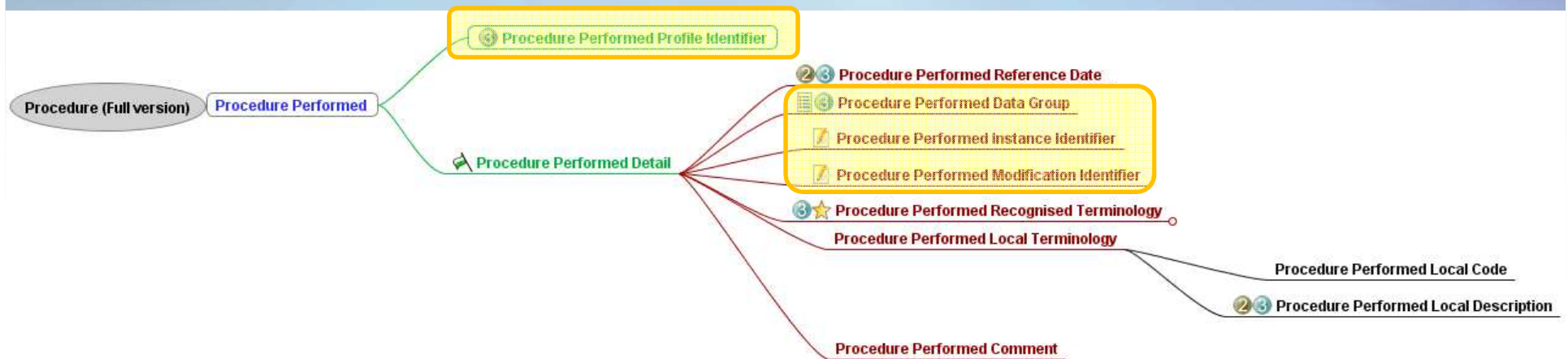
Mindmap – Procedure (Simplified Version)



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

Mindmap – Procedure (Full Version)



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

Example for Procedure – Level 2

Entity Name	Data requirement (Certified Level 2)	Example (Certified Level 2)
Procedure performed reference date	M	6/12/2010
Procedure performed local code	O	2231
Procedure performed local description	M	Lobectomy of left lung
Procedure performed comment	O	lower lobe

Example for Procedure – Level 3

Entity Name	Data requirement (Certified Level 3)	Example (Certified Level 3)
Procedure performed reference date	M	6/12/2010
Procedure performed - recognised terminology name ★	M	HKCTT
Procedure performed identifier - recognised terminology ★	M	23815
Procedure performed description - recognised terminology ★	M	Lobectomy of lung - left lower lobe
Procedure performed local code	O	2231
Procedure performed local description	M	Lobectomy of left lung
Procedure performed comment	O	lower lobe

Codex – Recognised Terminology Name (Procedure)

eHR Sharable Data - Codex: Recognised Terminology Name - Procedure

Recognised terminology name - procedure

Purpose: To define the names of the recognised terminology for procedure

Reference eHR

Term ID	eHR Value	eHR Description
	HKCTT	Hong Kong Clinical Terminology Table
	SNOMED CT	Systematized Nomenclature of Medicine - Clinical Terms
	ICPC2	International Classification for Primary Care, Second edition



Data Schema – Procedure (Simplified Version)

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)
Procedure (Simplified version)	Procedure performed reference date	1003406	Date when the procedure was performed. For eHR, if this date is not available, the create date of the procedure data should be used when submitting data to the eHR.	TS	Time Stamp		R		NA	M	M		6/12/2010	6/12/2010
Procedure (Simplified version)	Procedure performed - recognised terminology name	1003407	Name of the recognised terminology / classification from which the procedure performed is referenced to	CE	Coded Element	If eHR value = 1)HKCTT, nature must be Procedure;2)SNOMED CT, hierarchy must be Procedure;3)ICPC2, allowable items would be all codes ended in the range of 30-69	R	Recognised terminology name - procedure	NA	NA	M			HKCTT
Procedure (Simplified version)	Procedure performed identifier - recognised terminology	1003412	Unique Identifier of the procedure performed in the recognised terminology	CE	Coded Element	It should be included in the selected terminology of the [Recognised Terminology Name - Procedure] code table - 1)HKCTT should be TermID; 2)SNOMED CT should be ConceptID; 3)ICPC2 should be code	R		NA	NA	M			23815
Procedure (Simplified version)	Procedure performed description - recognised terminology	1003413	The description of the procedure performed in the recognised terminology. It should be the corresponding description of the selected [Procedure performed identifier - recognised terminology]	CE	Coded Element	It should be matched with the corresponding description of the selected [Procedure performed identifier - recognised terminology]; 1) HKCTT should be eHR description; 2) SNOMED CT should be Preferred term; 3) ICPC2 should be Full description	R		NA	NA	M			Lobectomy of lung - left lower lobe
Procedure (Simplified version)	Procedure performed local code	1003414	Local code created by the healthcare provider for the procedure performed	ST	String		R		NA	O	O		2231	2231
Procedure (Simplified version)	Procedure performed local description	1003415	Local description created by the healthcare provider for the procedure performed	ST	String		R		NA	M	M		Lobectomy of left lung	Lobectomy of left lung
Procedure (Simplified version)	Procedure performed comment	1003416	Comment made on the procedure performed	ST	String		R		NA	O	O		lower lobe	lower lobe

eHR

DATA COMPLIANCE LEVEL



Data to eHR

For displaying data in eHR viewer

For grouping data in eHR viewer / secondary use of eHR data

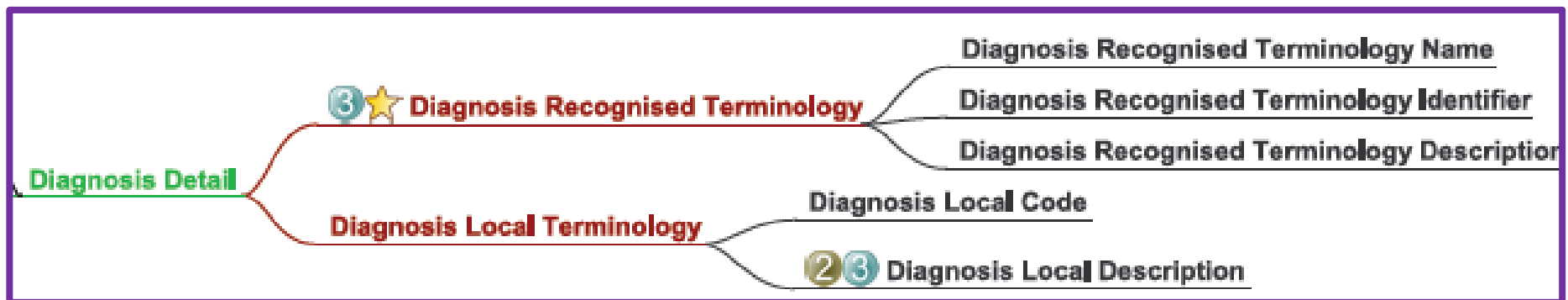
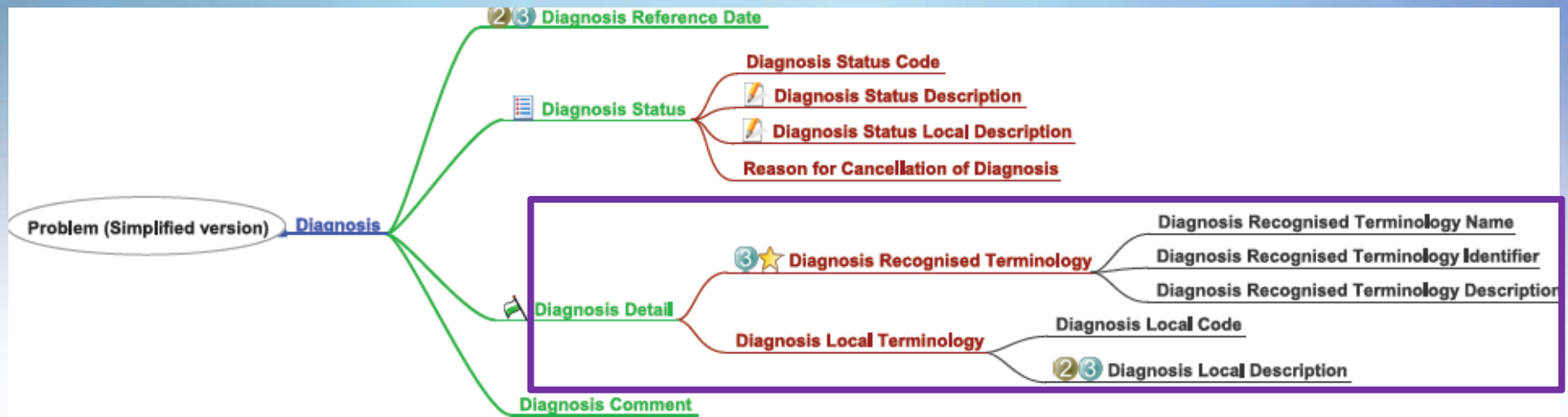
Declared Standard Level	Unstructured data PDF, Free Text	Local structured data		Recognised structured data			
		Local Code	Local Description	Types	Recognised Terminology Name	Recognised Code	Recognised Description
1		NA	NA	---	NA	NA	NA
2	Optional	Optional	Mandatory	---	NA	NA	NA
3	Optional	Optional	Mandatory	Recognised Terminology	Mandatory	Mandatory	Mandatory
				Code Tables	---	Mandatory	Mandatory

Local description must be sent to eHR, but local code is optional

When sending local description to eHR :

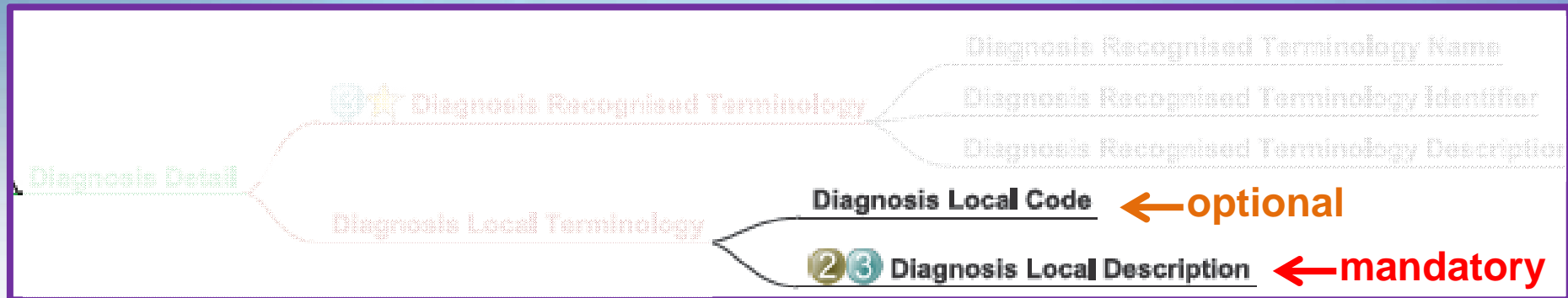
- Send local term if map local table to standard one
- Send term of the recognised terminology if adopt recognised terminology in local system directly

Set of 5



Set of 5

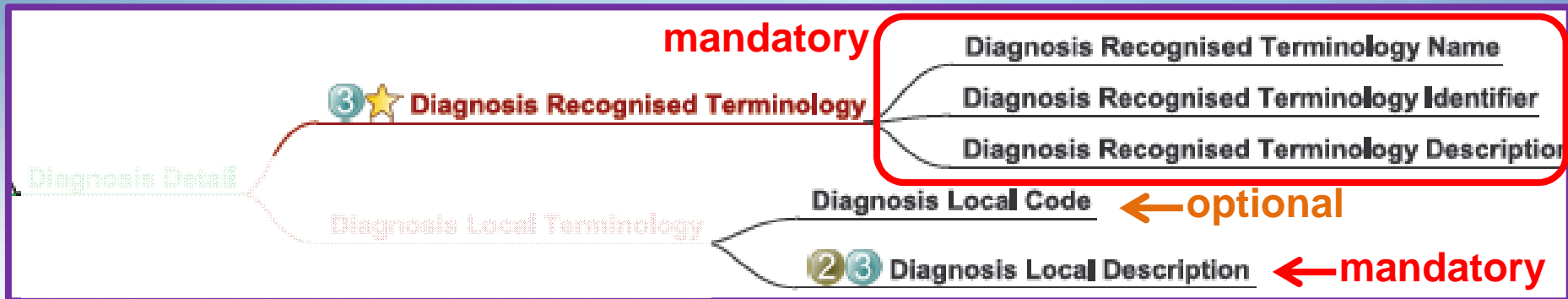
Problem – Level 2 Compliance



Example	Diagnosis Local Code	Diagnosis Local Description
1	----	Haemorrhoid
2	HM	Hemorrhoid
3	123	Piles

Set of 5

Problem – Level 3 Compliance



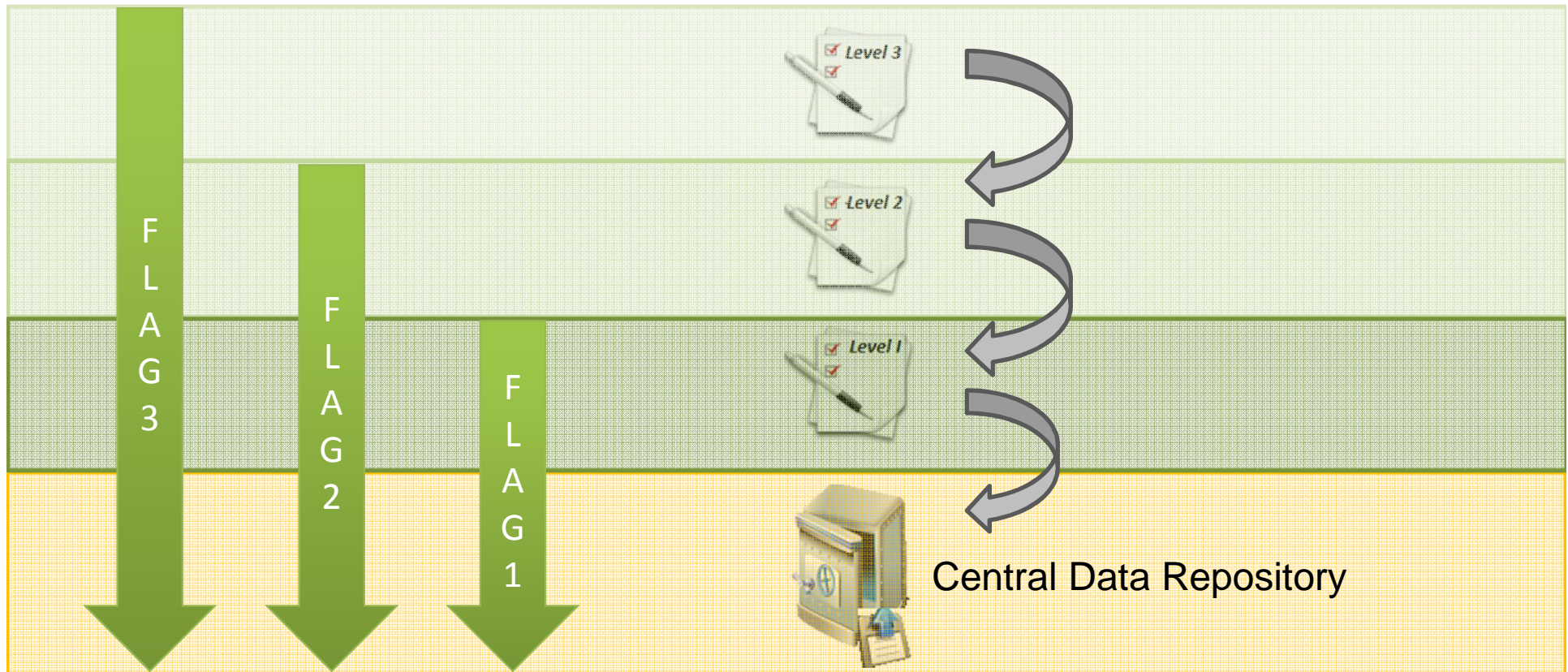
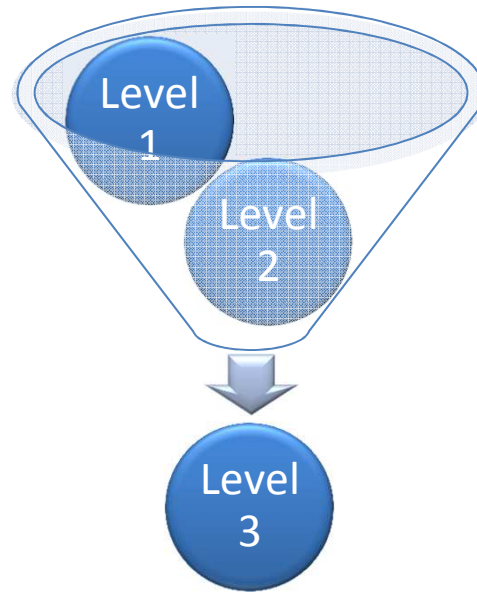
Example	Rcg Term. Name	Rcg Term. ID	Rcg Term. Des	Local Code	Local Description
1	SNOMED CT	233604007	Pneumonia	----	Pneumonia
2	ICD 10	J18.9	Pneumonia	PN	Pneumonia
3	HKCTT	8471	Pneumonia	123	Chest infection
4	HKCTT	8471	Pneumonia	---	Pneumonia

Level 3

DATA VALIDATION



Overall Mechanism for Data Validation



Validation of Uploaded Level 3 Data

- eHR HCPs may transmit structured data to eHRSS
- eHRSS will validate the transmitted data:
 1. Recognised terminology (RT)
 - Does it exist in the declared RT?
 - Does it belong in the appropriate nature of the declared RT for the respective domain?
 - Does the description match with the one in the declared RT?
 2. Codex
 - Does it exist in the declared Codex table?
 - Does the description match with the one in the declared Codex table?



Validation Matrix for RT codes and Codex transmitted as Level 3 data

Case	RT/ Codex	Name	Code	Description	Code exist?	Nature / Hierarchy correct?	Code Desc. match with official set?	Related ID exist in HKCTT?	Problem Flag	Follow up by	Output Data Level
1	Recognised Terminologies	HKCTT	TermID	Description	Y	Y	Y	--	N	--	3
2					Y	Y	N	--	Y	HCP	2
3					Y	N	--	--	Y	HCP	2
4					N	--	--	--	Y	HCP	2
5		SNOMED CT / LOINC...	SCT concept ID / LOINC Code ...	SCT PN / LOINC Common name...	Y	Y	Y	Y	N	--	3
6					Y	Y	Y	N	Y	eHRISO	3 or 2*
7					Y	Y	N	--	Y	HCP	2
8					Y	N	--	--	Y	HCP	2
9					N	--	--	--	Y	HCP	2
10	Codex	--	eHR Value	eHR Description	Y	--	Y	--	N	--	3
11					Y	--	N	--	Y	HCP	2
12					N	--	--	--	Y	HCP	2

Remark * - For LOINC, the output data level as 2; for other terminologies, output data level as 3

HCP's responsibility

- Check eHR Inbox upon receiving notification of message from email account
- If an exception report is delivered, follow up accordingly
 - Update terminology/codex data
 - Update patient record
 - Re-transmit patient records to eHR
- Clarify with eHRISO if needed

For Case 6

Please see attached the list for RT code transmitted to eHR in the XXX domain which was **NOT mapped to any HKCTT** concept for the period 1/5/2012 to 31/5/2012.

HCP (institution)	RT Name	RT Identifier	RT Description	Local Code (if any)	Local Description

Please check.

For Case 2 & 7

The **descriptions** of the following codes transmitted to eHR for the period 1/5/2012 to 7/5/2012 were found **NOT matched with the official terminology set** for the declared domain:

Record key	RT Name	RT Identifier	RT Description	Local Code (if any)	Local Description

Please check if the code was input incorrectly and appreciated if rectification could be arranged at your convenience.

For Case 3 & 8

The following code transmitted to eHR for the period 1/5/2012 to 7/5/2012 was found **NOT appropriate for the domain**:

Record key	RT Name	RT Identifier	RT Description	Local Code (if any)	Local Description

Please check if the code was input incorrectly and appreciated if rectification could be arranged at your convenience.

For Case 4 & 9

The following code transmitted to eHR for the period 1/5/2012 to 7/5/2012 was **NOT found in the declared Recognised Terminology**:

Record key	RT Name	RT Identifier	RT Description	Local Code (if any)	Local Description

Please check if the code was input incorrectly and appreciated if rectification could be arranged at your convenience.

For Case 11 / 12

The following code transmitted to eHR for the period 1/5/2012 to 7/5/2012 was **NOT matched/found in the eHR Codex table**:

Record key	Codex Name	Codex Identifier	Codex Description	Local Code (if any)

Please check if the code was input incorrectly and appreciated if rectification could be arranged at your convenience.

Summary

- Problem & Procedure
 - Independent domains
 - Accept Level 2 & Level 3
- Validation rules apply to data captured with Recognised Terminology / Codex table
 - Follow-up might be required

Thank You

End of
Patient data transmission



Seminar on Recognised Terminology – Hong Kong
Clinical Terminology Table (HKCTT)

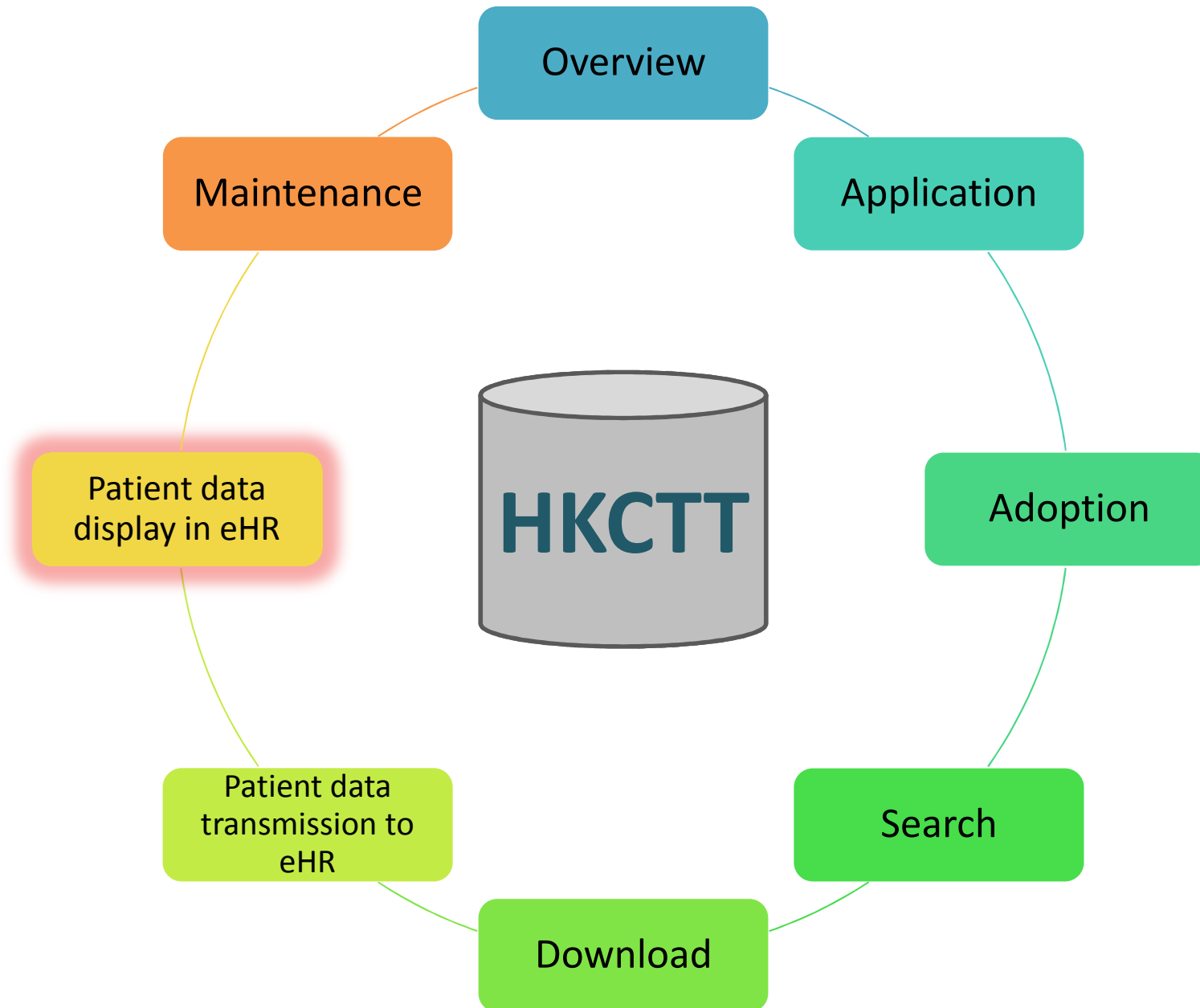
Display of patient data with HKCTT on eHR Viewer

Austen WONG

Health Informatics Analyst
eHR Information Standard Office

16 April 2014

Terminology for eHR - HKCTT



Outline

- Patient data on eHR Viewer
 - Problem domain
 - Procedure domain
- Grouping with TermID
 - By individual
 - By grouping list



Patient data on eHR viewer

PROBLEM



eHR Viewer - Problem (Summary View)

王黑莓 WONG, BLACKBERRIES
 HKIC : UH9773216 DOB : 29-Feb-1912 Age : 101 years Sex : M Details ▶

醫健通 health
 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

Problem / Diagnosis Summary Details ▶

Date	Description
24-Feb-2013	? Diabetes Mellitus
24-Feb-2013	Type II diabetes mellitus with complication
24-Feb-2013	? Type II diabetes mellitus with triopathy
24-Feb-2013	Type II diabetes mellitus with ischaemic heart...
03-Jan-2012	Cluster headache
28-Feb-2011	Delirium

>>More

Laboratory Summary Details ▶

Date	Description	Institution
24-Dec-2012	AD, RFT	VUC4_A
15-Dec-2012	APTT,PT	VHC4
21-Aug-2012	AD	VHC4
20-Aug-2012	Haematology Result	VHC4
09-Aug-2012	Haematology Laboratory Report (PDF)	QEH
09-Aug-2012	Molecular Pathology Report (PDF)	QEH

>>More

Encounter Summary Details ▶

Start Date	Specialty	Institution
04-Jul-2013	Internal Medicine	VHA
15-May-2013	General Surgery	VHA
15-Apr-2013	Ophthalmology	VHA
15-Mar-2013	General Surgery	VHA

Allergy & Adverse Drug Reaction

Allergen	ADR Causative Agent
DOXYCYCLINE	DICLOFENAC
AUGMENTIN	METHYLDOPA
PENICILLIN	INDAPAMIDE
	RAMIPRIL






Prescribing History Summary

Date	Medication
04-Jan-2013	Aminoleban (arginine (a LORAZEPAM PREDNISOLONE ADRENALINE RIFINAH 300 CITALOPRAM
03-Jan-2013	ISONIAZID CETRIMIDE

eHR Viewer - Problem (Full List View)

王樂華 WONG, BLACKBERRIES
HKIC : UH9773216 DOB : 29-Feb-1912 Age : 101 years Sex : M Details ▶

Problem / Diagnosis View: Active ▼

Date	Description	Institution
24-Feb-2013	?  Diabetes Mellitus	PMH
24-Feb-2013	Type II diabetes mellitus with complication	PMH
24-Feb-2013	 ? Type II diabetes mellitus with triopathy	PMH
24-Feb-2013	Type II diabetes mellitus ischaemic heart disease	PMH
03-Jan-2012	 Cluster headache	HosA
28-Feb-2011	Delirium	ClinC
03-Jan-2004	 Hepatitis	HosA
01-Jan-1999	 Viral hepatitis	CliniP

Comment: cause un

Click  to see comments

Click folder to see details

eHR Viewer - Problem (Detail View)

Problem / Diagnosis Details			Return ↩
Date	Diagnosis Description	Institution	
Cluster headache			
03-Jan-2012	Cluster headache syndrome	HosA	
28-Feb-2000	Cluster headache	HosB	
03-Mar-1999	Cluster headache	HosM	
04-Feb-1999	Cluster headache	HosX	

Local descriptions transmitted by HCP

Avoid using abbreviations in local description


Patient data on eHR viewer

PROCEDURE



eHR Viewer – Procedure

王黑莓 WONG, BLACKBERRIES
 HKIC : UH9773216 DOB : 29-Feb-1912 Age : 101 years Sex : M [Details ▶](#)



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

Problem / Diagnosis Summary Details ▶

Date	Description
24-Feb-2013	? Diabetes Mellitus
24-Feb-2013	Type II diabetes mellitus with complication
24-Feb-2013	? Type II diabetes mellitus with triopathy
24-Feb-2013	Type II diabetes mellitus with ischaemic heart...
03-Jan-2012	Cluster headache
28-Feb-2011	Delirium

>>More

Laboratory Summary Details ▶

Date	Description	Institution
24-Dec-2012	AD, RFT	VUC4_A
15-Dec-2012	APTT,PT	VHC4
21-Aug-2012	AD	VHC4
20-Aug-2012	Haematology Result	VHC4
09-Aug-2012	Haematology Laboratory Report (PDF)	QEH
09-Aug-2012	Molecular Pathology Report (PDF)	QEH

>>More

Encounter Summary Details ▶

Start Date	Specialty	Institution
04-Jul-2013	Internal Medicine	VHA
15-May-2013	General Surgery	VHA
15-Apr-2013	Ophthalmology	VHA
15-Mar-2013	General Surgery	VHA

Allergy & Adverse Drug Reaction

Allergen	ADR
DOXYCYCLINE	Co
AUGMENTIN	Co
PENICILLIN	Su

ADR Causative Agent

ADR Causative Agent	ADR
DICLOFENAC	Se
METHYLDOPA	Mi
INDAPAMIDE	Mi
RAMIPRIL	Mi

Prescribing History Summary

Date	Medication
04-Jan-2013	Aminoleban (arginine (a LORAZEPAM PREDNISOLONE ADRENALINE RIFINAH 300 CITALOPRAM
03-Jan-2013	ISONIAZID CETRIMIDE

eHR Viewer – Procedure (Full list View)

王黑莓 WONG, BLACKBERRIES

HKIC : UH9773216

DOB : 29-Feb-1912

Age : 101 years





Sex : M

[Details](#) ▶



Procedure

View: /

Date	Description	Institution
10-Jan-2013	Rehabilitation	HosA
05-Jan-2013	 Ultrasonogram of abdomen	AHN
04-Jan-2013	  Open reduction and fixation - screw to right proximal femur (star drive screw)	PWH
04-Jan-2013	Free skin flap	PWH
04-Jan-2013	Neuroplasty	PWH
06-Dec-2013	 Lobectomy of left lung	HosM

Comment: lower lobe



eHR Viewer – Procedure (Detail View)

Procedure Details			Return ←
Date	Procedure	Institution	
Ultrasonogram of abdomen			
05-Jan-2013	Ultrasonogram of abdomen	AHN	
13-Jan-2010	Ultrasonogram of abdomen	AHN	

Local descriptions transmitted by HCP

Avoid using abbreviations in local description

HKCTT Grouping (I)

GROUPING WITH INDIVIDUAL TERMID



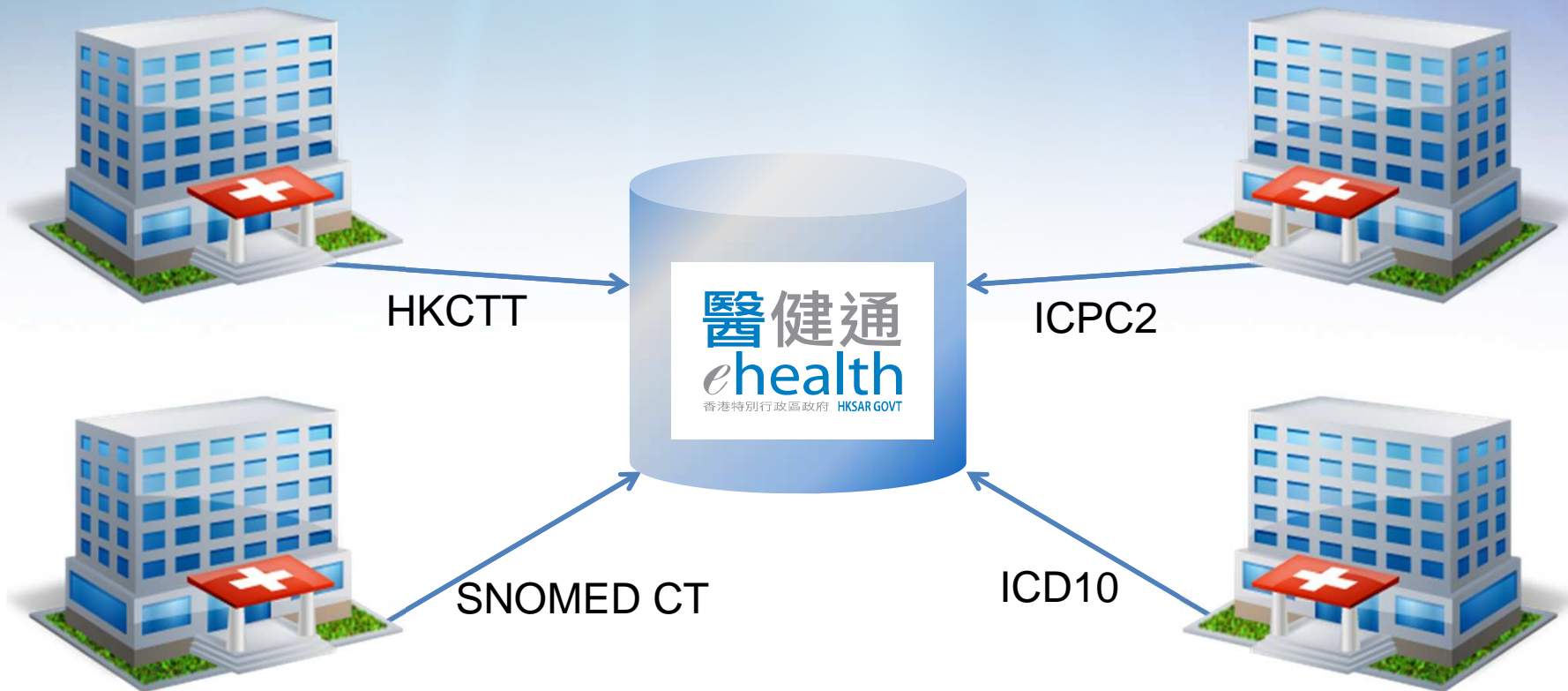
Recognised Terminologies in eHR

- Hong Kong Clinical Terminology Table (HKCTT)
- International Classification of Diseases, 10th Revision (ICD 10)
 - International Classification of Diseases, 10th Revision (ICD 10), 2001 release
 - International Classification of Diseases, 10th Revision (ICD 10), 2010 release
 - International Classification of Diseases, 10th Revision (ICD 10), Mental Health & Behavioural Disorders (MBD)
- ^International Classification for Primary Care, 2nd Edition (ICPC2)
- Logical Observations, Identifiers Names and Codes (LOINC)
- Registered Pharmaceutical Products (RPP)
- Systematized Nomenclature of Medicine, Clinical Terms (SNOMED CT)


^ICPC2 license is still under negotiation with WONCA



Transmission of patient data with different Recognised Terminologies



Use of TermID for grouping



Date	Provider	Local Description	Code	Recognised Terminology	Term ID
3 Jan 2012	Hospital A	Cluster headache syndrome	G44.0	ICD10	6052
28 Feb 2000	Hospital B	Cluster headache	193031009	SNOMED CT	6052
3 Jul 1999	Hospital M	Cluster headache	6052	HKCTT	6052
4 Feb 1999	Hospital X	Cluster headache	N90	ICPC2	6052

ICPC2 license is still under negotiation with WONCA

TermID and the mapping



Concept Detail						
Term ID	6052	IN USE	Nature	Diagnosis (Dx)	Stage	In Use
Full Description	Cluster headache					
Short Description	Cluster headache					
eHR Description	Cluster headache					
Alias						
Validation Rule	Principal	Yes	Sex	N/A		
Remarks						
Definition						
ICD10-2001	<u>G44.0</u>	ICD10 G44.0 Cluster headache syndrome				
ICD10-2010+MBD	<u>G44.0</u>	ICPC2 N90 Cluster headache				
ICPC2	<u>N90</u>	SNOMED CT 193031009 Cluster headache				
SNOMED CT	<u>193031009</u>					

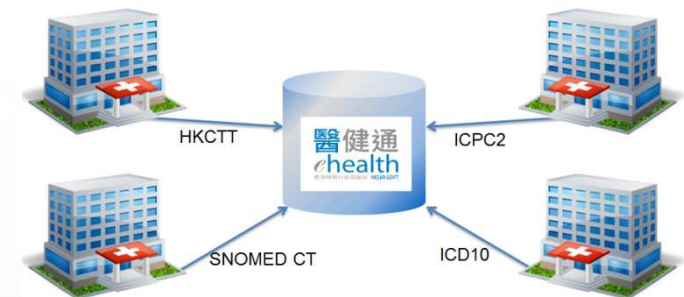
ICPC2 license is still under negotiation with WONCA

Problem – Cluster headache (Full List View)

Problem / Diagnosis			
View: Active ▾			
Date		Description	Institution
24-Feb-2013	?	Diabetes Mellitus	PMH
24-Feb-2013		Type II diabetes mellitus with complication	PMH
24-Feb-2013	i ?	Type II diabetes mellitus with triopathy	PMH
24-Feb-2013		Type II diabetes mellitus ischaemic heart disease	PMH
03-Jan-2012		Cluster headache	HosA
28-Feb-2011	i	Delirium	ClinC
03-Jan-2004		Hepatitis	HosA
01-Jan-1999		Viral hepatitis	CliniP

Problem – Cluster headache (Detail View)

Problem / Diagnosis Details			Return ↗
Date	Diagnosis Description	Institution	
Cluster headache			
03-Jan-2012	Cluster headache syndrome	HosA	Group by TermID
28-Feb-2000	Cluster headache	HosB	
03-Mar-1999	Cluster headache	HosM	
04-Feb-1999	Cluster headache	HosX	



HKCTT Grouping (II)

GROUPING WITH GROUPING LIST



Background

- “Codes to CDF” lists in Hospital Authority (HA)
 - HA has Clinical Data Framework (CDF) to facilitate diagnosis and procedure reporting
 - To restrict users to report via corresponding CDFs, some code entries are “forced” to use the CDFs, hence “Codes to CDF”
- eHR Grouping list
 - reference to these “Codes to CDF” lists
 - ~100 as of Apr 2014

Use of TermID Grouping list for grouping



Date	Provider	Local Description	Code	Recognised Terminology	TermID	Grouping TermID
3 Jan 2004	Hospital A	Chronic viral hepatitis B infection	B18.1	ICD10	1008	41635 Hepatitis
9 Sep 2002	Hospital B	Chronic type B viral hepatitis	61977001	SNOMED CT	1008	
4 Dec 2000	Hospital K	Alcoholic hepatitis	K70.1	ICD10	29392	
3 Mar 1999	Clinic M	Chronic viral hepatitis B infection	1008	HKCTT	1008	
4 Feb 1999	Clinic T	Viral hepatitis	D72	ICPC2	1023	
1 Jan 1999	Clinic P	Viral hepatitis	V hep	--	--	

ICPC2 license is still under negotiation with WONCA



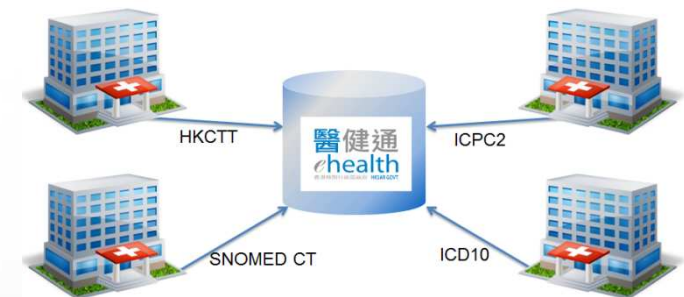
Problem – Hepatitis (Full List View)

Problem / Diagnosis			
			View: Active ▾
Date		Description	Institution
24-Feb-2013	? 📁	Diabetes Mellitus	PMH
24-Feb-2013		Type II diabetes mellitus with complication	PMH
24-Feb-2013	i ?	Type II diabetes mellitus with triopathy	PMH
24-Feb-2013		Type II diabetes mellitus ischaemic heart disease	PMH
03-Jan-2012	📁	Cluster headache	HosA
28-Feb-2011	i	Delirium	ClinC
03-Jan-2004	📁	Hepatitis	HosA
01-Jan-1999		<u>Viral hepatitis</u>	CliniP



Problem – Hepatitis (Detail View)

Problem / Diagnosis Details			Return ↩
Date	Diagnosis Description	Institution	
Hepatitis			
03-Jan-2004	Chronic viral hepatitis B infection	HosA	Group by Grouping list
09-Sep-2002	Chronic type B viral hepatitis	HosB	
04-Dec-2000	Alcoholic hepatitis	HosK	
03-Mar-1999	Chronic viral hepatitis B infection	CliniM	
04-Feb-1999	Viral hepatitis	CliniT	



Summary

- Display of Patient data on eHR Viewer
 - Local descriptions for individual entry
 - HKCTT concept descriptions for group labels
- Grouping with TermID / Grouping list if applicable
 - For Level 3 data only



Thank You

