eHR Record Content - Laboratory Result

By John MOK

Health Informatician

Outline

- General Result
  - Chemical Pathology
  - Haematology
  - Immunology
  - Microbiology (Non C&ST)
  - Virology
- Microbiology Result
  - Culture test with Sensitivity Test (C&ST)
- Anatomical Pathology Result

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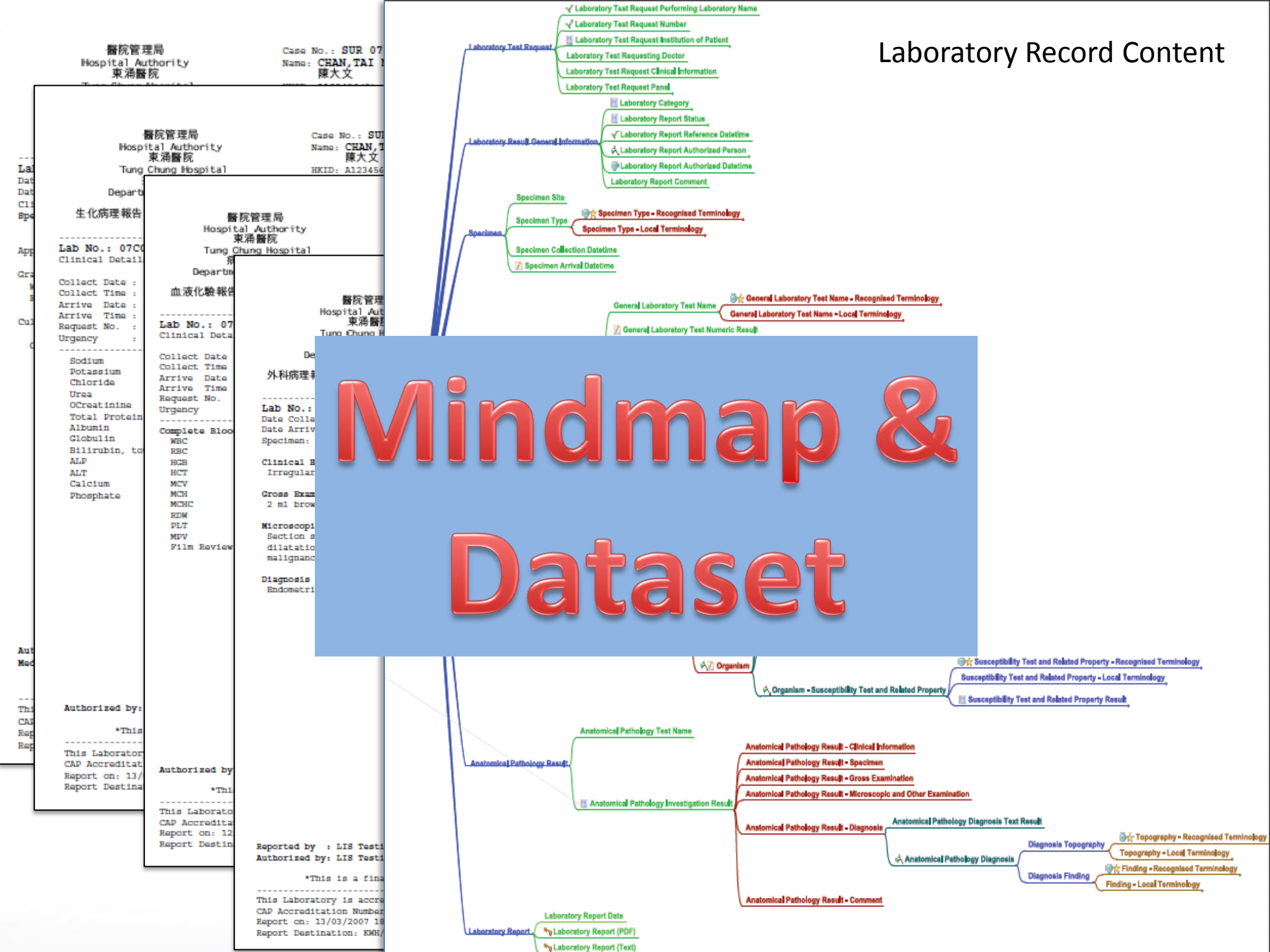
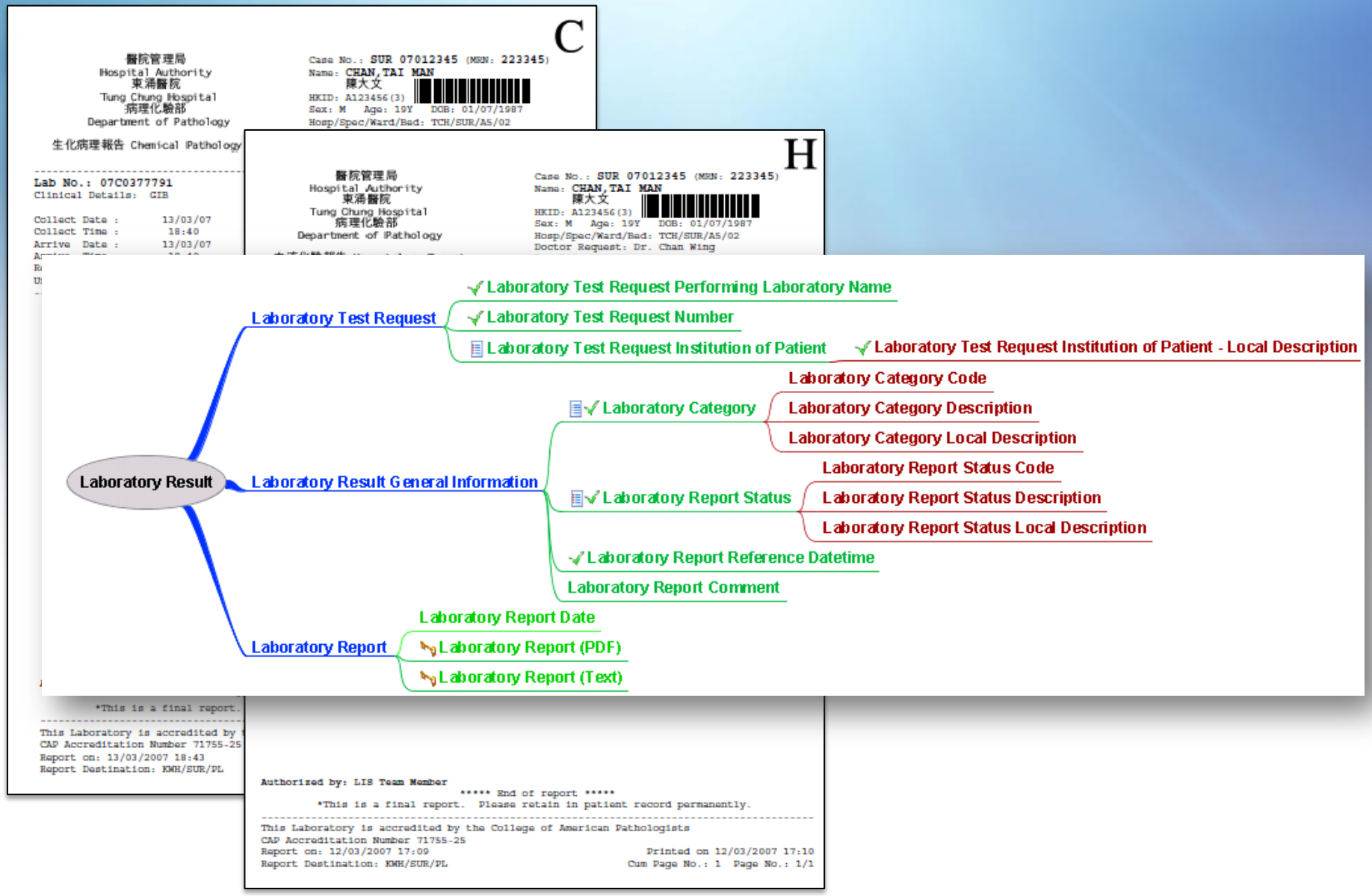
The classification is based on the report format and style, not the laboratory discipline itself

Laboratory Record Content



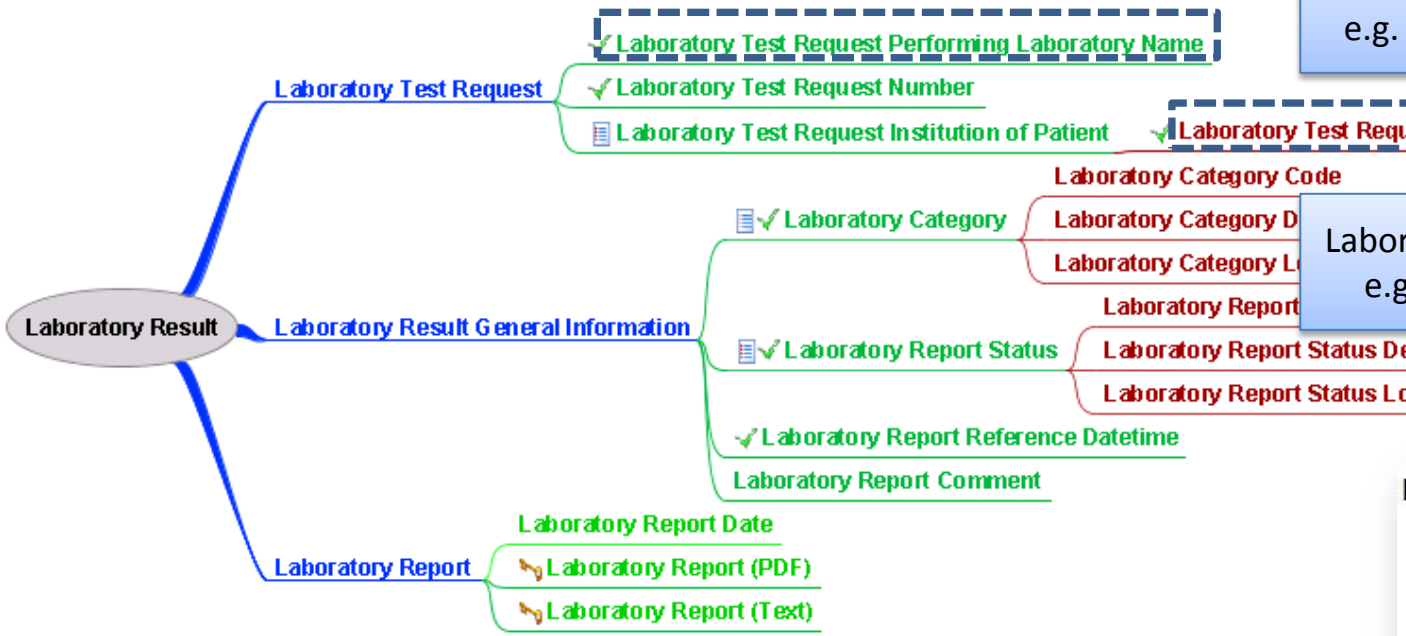
Laboratory Record Content for eHR

- Compliance Level
  - Level 1 – report PDF
  - Level 2 – structured data
  - Level 3 – structured data with Recognized Terminology
    - Specimen type – SNOMED CT, HKCTT
    - Laboratory Test – LOINC, HKCTT
    - Organism – SNOMED CT, HKCTT



GENERAL RESULT

Level 1 Compliance for General Result



Performing Laboratory Name:
e.g. Kowloon Bay ABC Laboratory

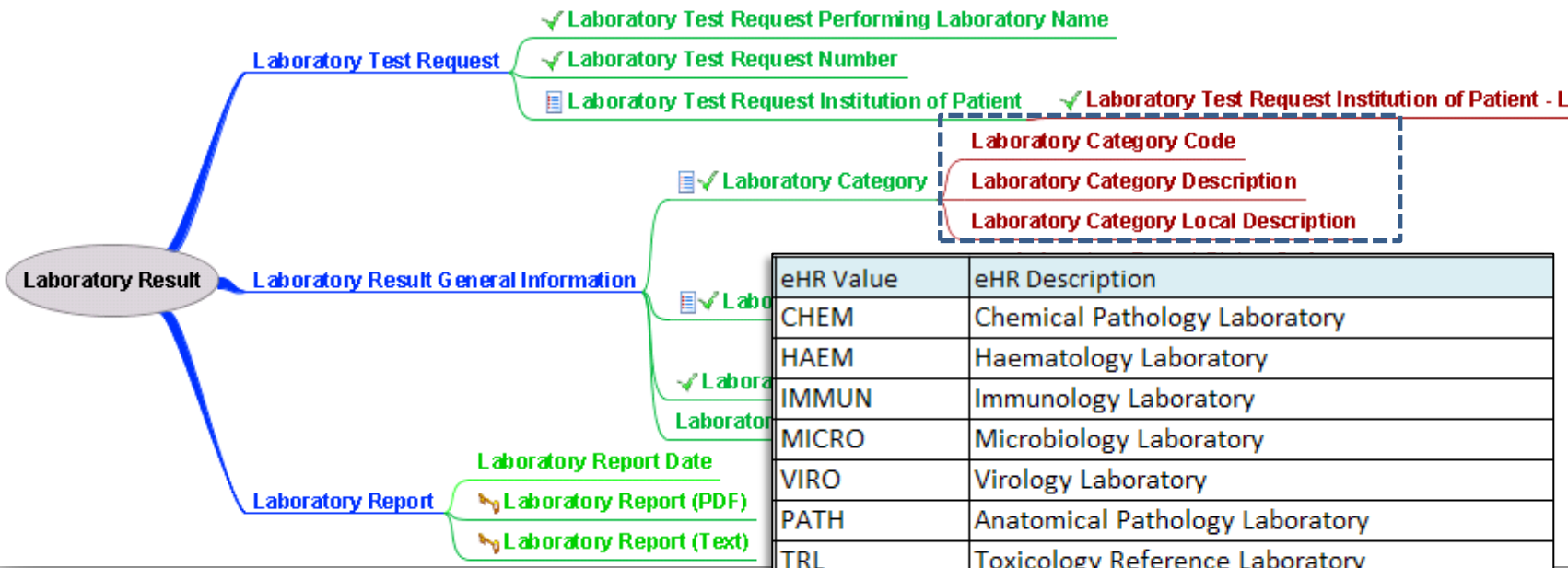
Laboratory Test Request Institution:
e.g. Kowloon Bay ABC Hospital

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

For level 1 compliance, report result body is basically in PDF or Text format

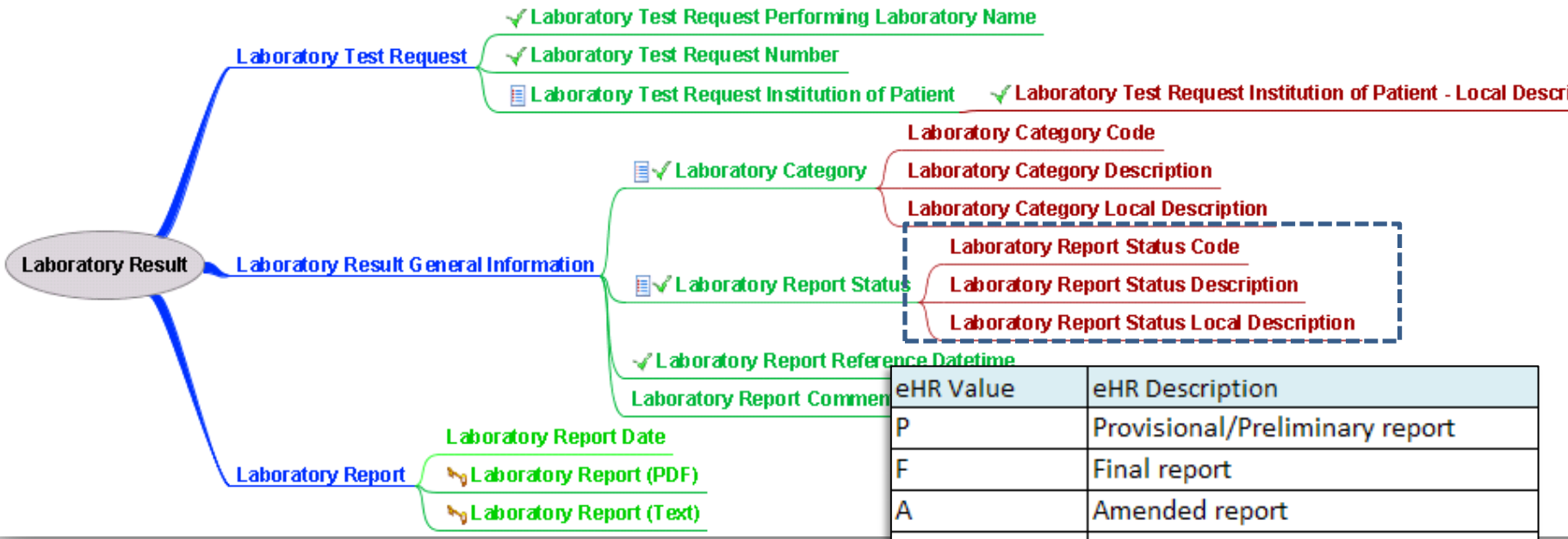
Level 1 Compliance (..2)



eHR Value	eHR Description
CHEM	Chemical Pathology Laboratory
HAEM	Haematology Laboratory
IMMUN	Immunology Laboratory
MICRO	Microbiology Laboratory
VIRO	Virology Laboratory
PATH	Anatomical Pathology Laboratory
TRL	Toxicology Reference Laboratory
BLDBK	Blood Bank
T&I	Transplantation & Immunogenetic Laboratory
MOLPATH	Molecular Pathology Laboratory
LAB	Clinical Laboratory

Laboratory Category is Mandatory for all levels, which it is used to categorize the laboratory type for the report

Level 1 Compliance (..3)

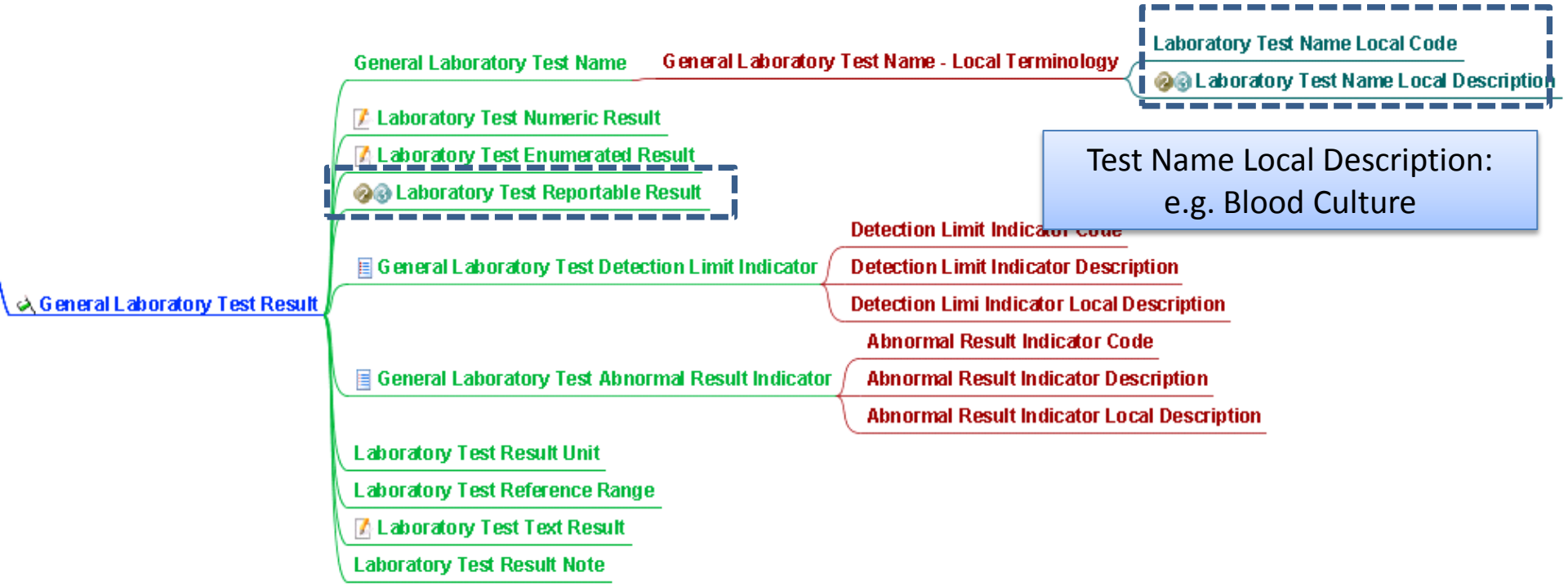


eHR Value	eHR Description
P	Provisional/Preliminary report
F	Final report
A	Amended report
S	Supplementary report

Laboratory Test Request - Performing Laboratory name, Request number,
and Laboratory Category, Laboratory Report Status and Report Reference Datetime are Mandatory for all levels

Level 2 compliance for General Result

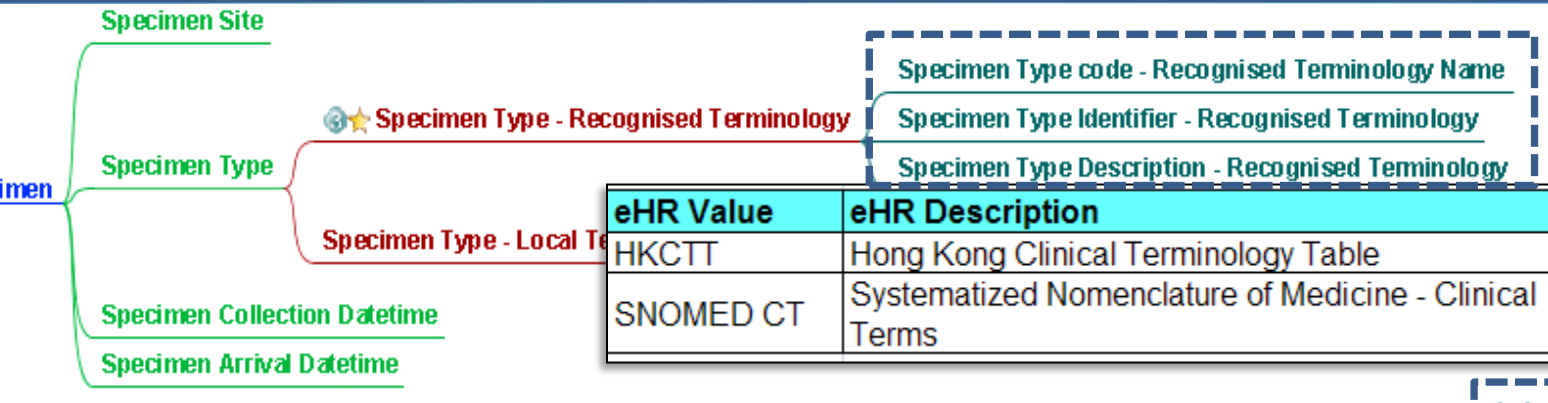
Specimen Local Description:
e.g. CSF



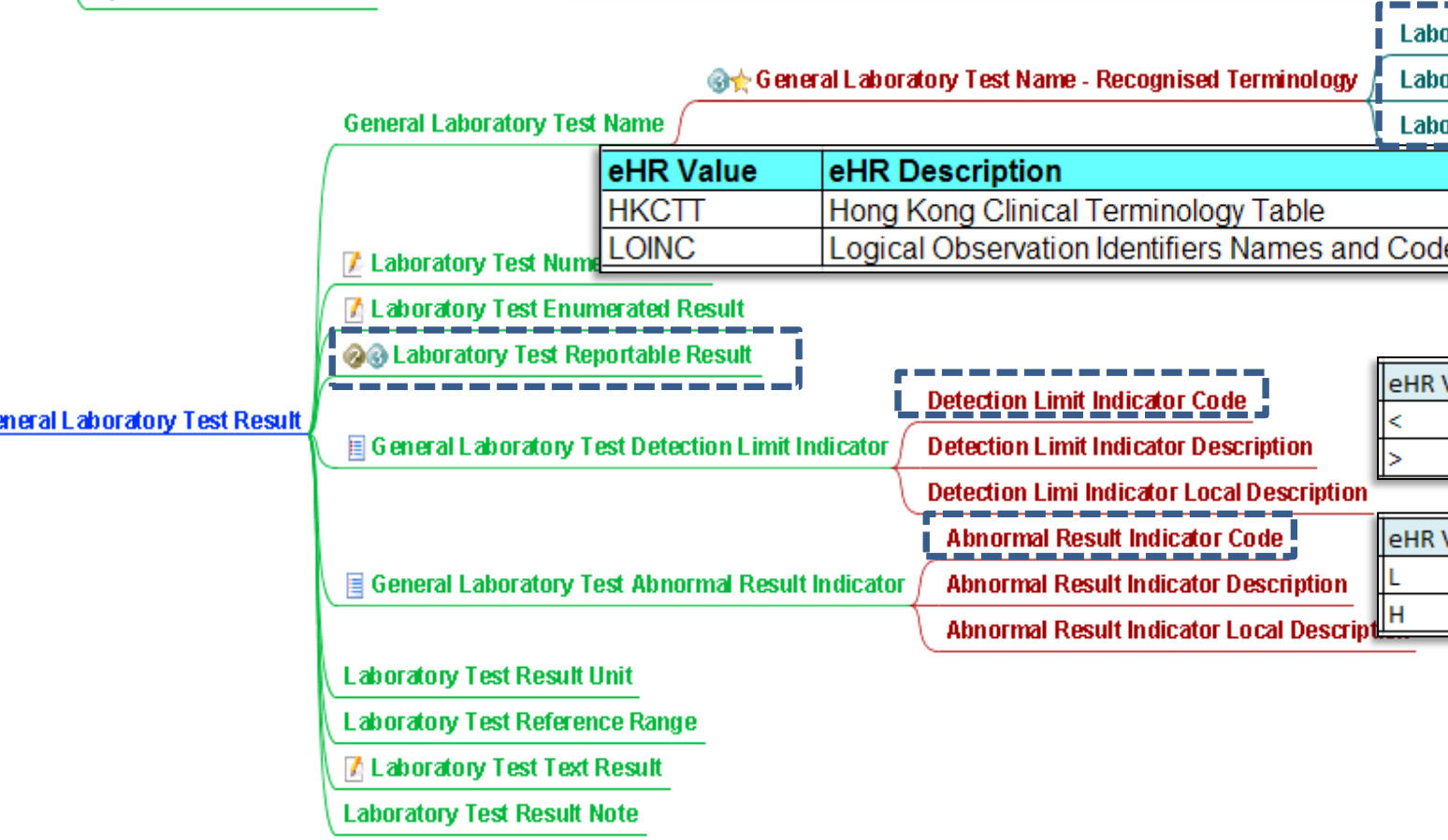
Test Name Local Description:
e.g. Blood Culture

Laboratory Test Name Local Description and Laboratory Test Reportable Result are Mandatory for Level 2 data

Level 3 Compliance for General Result



eHR Value	eHR Description	Allowable Values
HKCTT	Hong Kong Clinical Terminology Table	Nature = Specimen
SNOMED CT	Systematized Nomenclature of Medicine - Clinical Terms	Hierarchy = Specimen



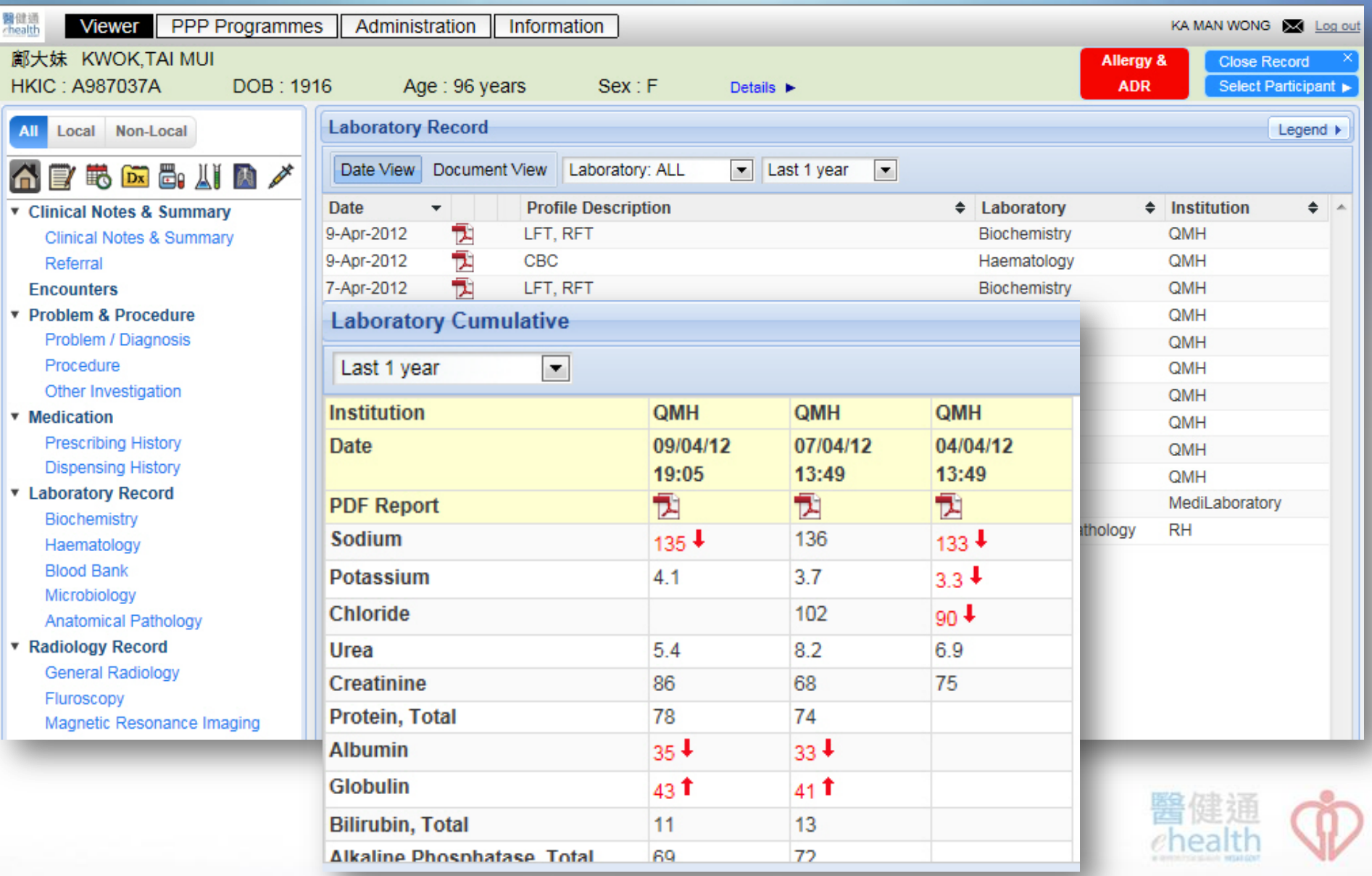
eHR Value	eHR Description	Allowable Values
HKCTT	Hong Kong Clinical Terminology Table	Nature = Lab. Test
LOINC	Logical Observation Identifiers Names and Codes	All values

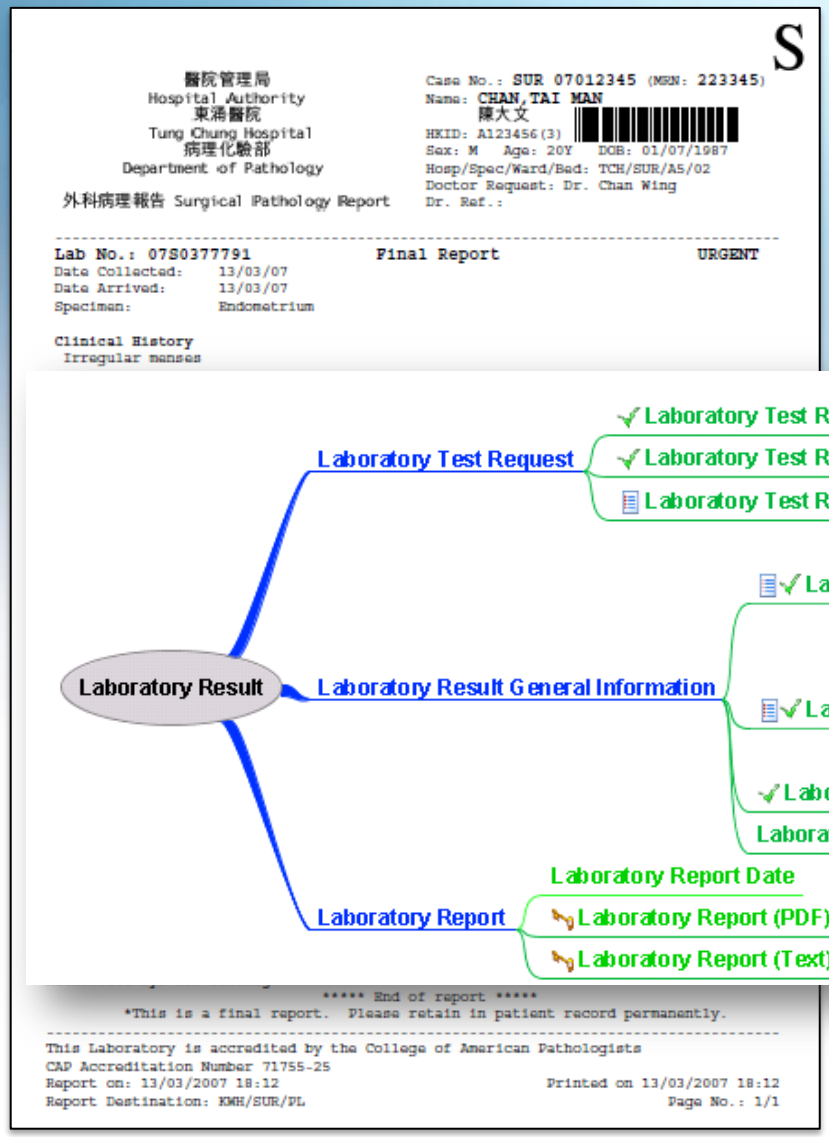
eHR Value	eHR Description
<	Less than
>	Greater than

eHR Value	eHR Description
L	Low
H	High

Structured General Result with recognized terminology for level 3 data compliance

General Laboratory Result





醫院管理局
Hospital Authority
東涌醫院
Tung Chung Hospital
病理化驗部
Department of Pathology

外科病理報告 Surgical Pathology Report

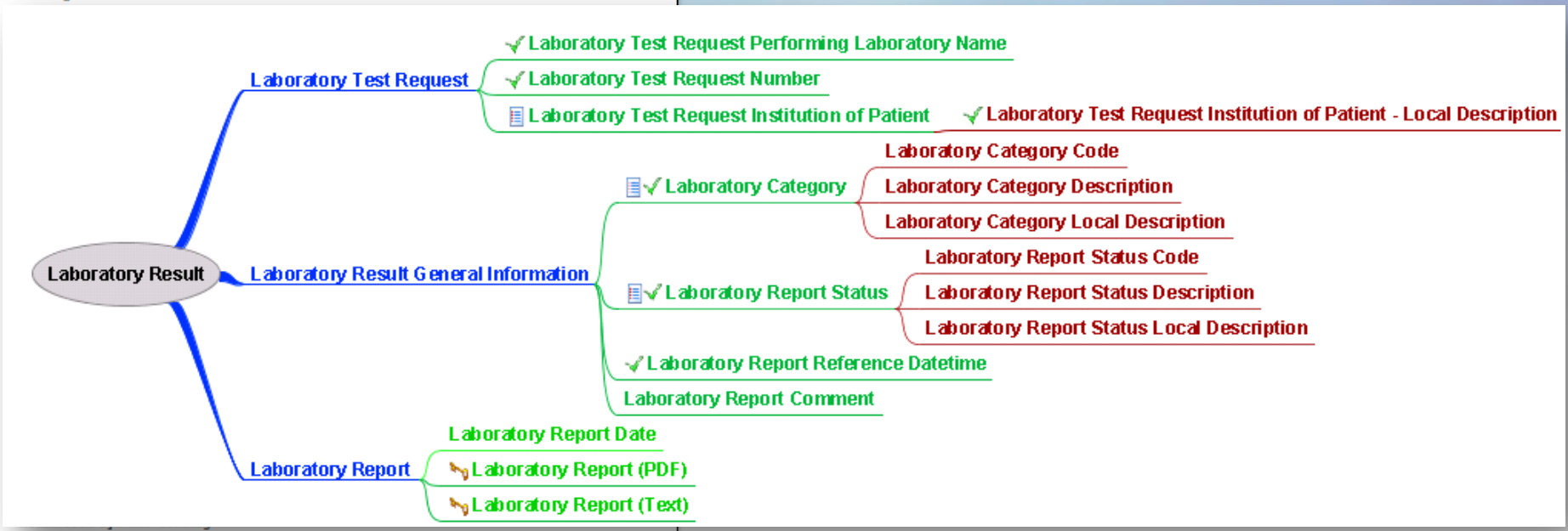
Case No.: SUR 07012345 (MRN: 223345)
Name: CHAN,TAI MAN
陳大文
HKID: A123456(3)
Sex: M Age: 20Y DOB: 01/07/1987
Hosp/Spec/Ward/Bed: TCH/SUR/A5/02
Doctor Request: Dr. Chan Wing
Dr. Ref.:

Lab No.: 07S0377791 Final Report URGENT
Date Collected: 13/03/07
Date Arrived: 13/03/07
Specimen: Endometrium

Clinical History
Irregular menses

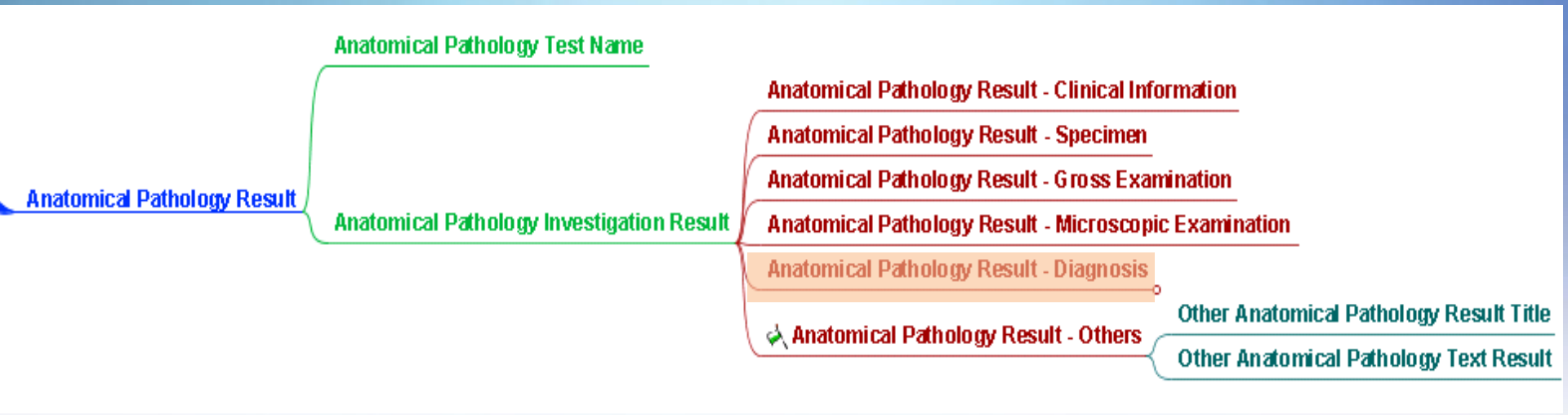
***** End of report *****
*This is a final report. Please retain in patient record permanently.

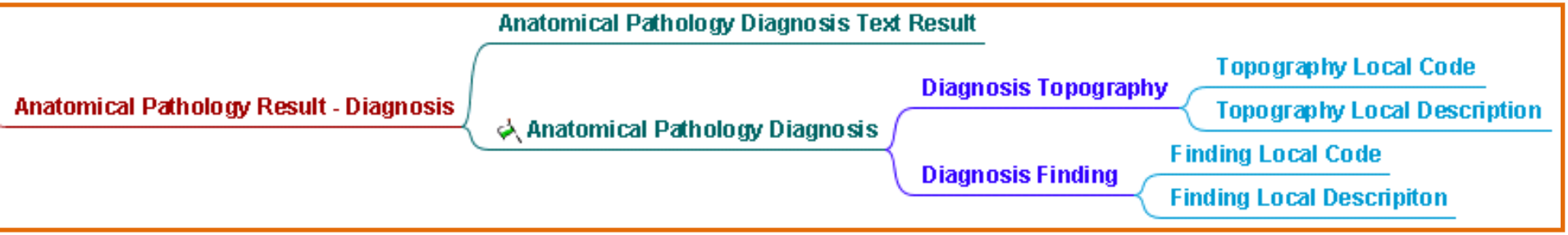
This Laboratory is accredited by the College of American Pathologists
CAP Accreditation Number 71755-25
Report on: 13/03/2007 18:12 Printed on 13/03/2007 18:12
Report Destination: KWH/SUR/PL Page No.: 1/1



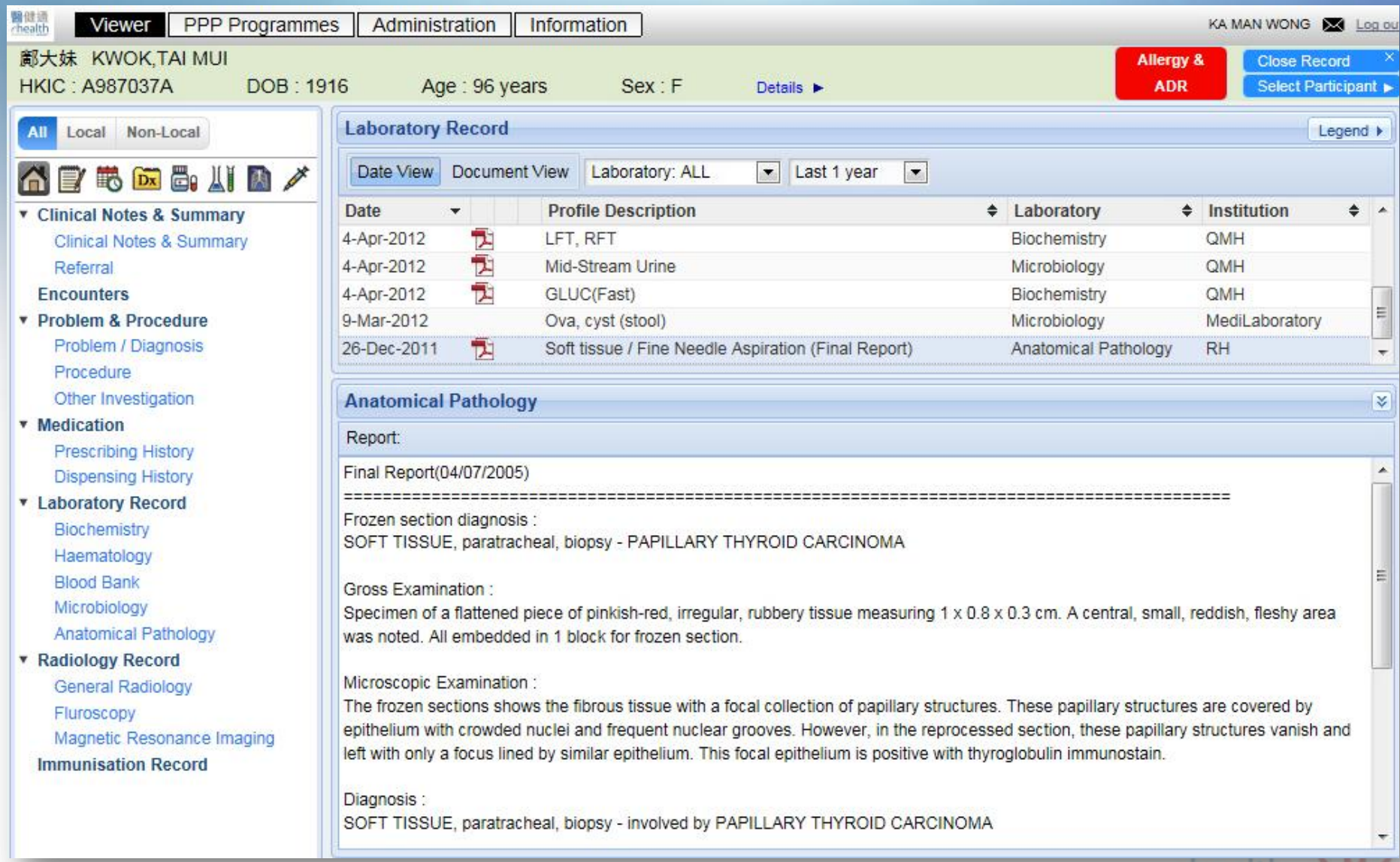
ANATOMICAL PATHOLOGY

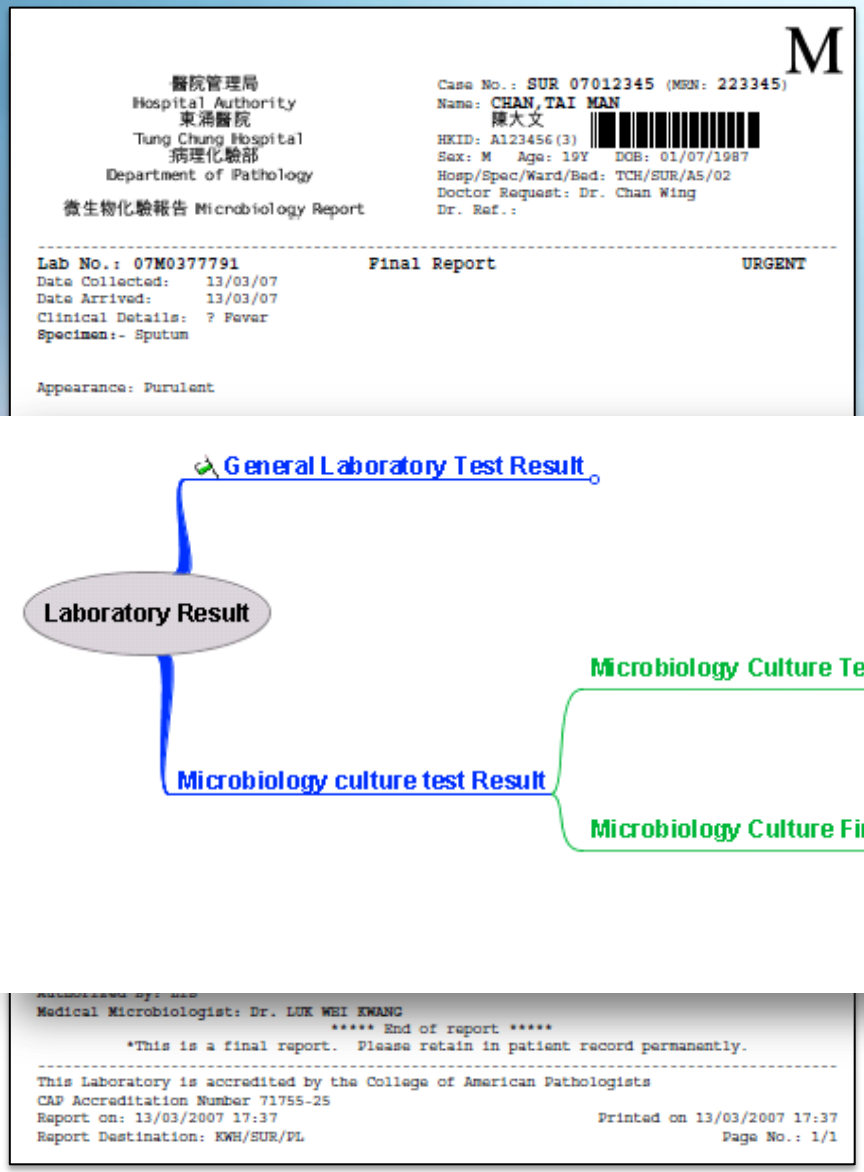
Anatomical Pathology Result – Level 2 Compliance





Anatomical Pathology Result





M

醫院管理局
Hospital Authority
東涌醫院
Tung Chung Hospital
病理化驗部
Department of Pathology

微生物化驗報告 Microbiology Report

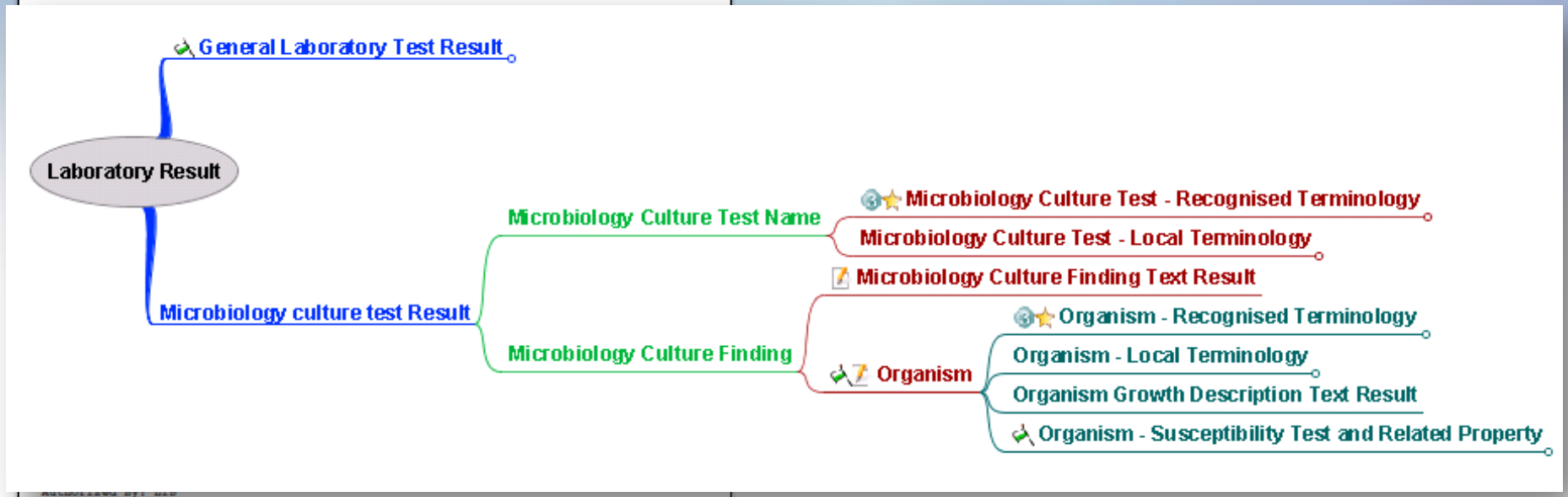
Case No.: SUR 07012345 (MRN: 223345)
Name: CHAN,TAI MAN
陳大文
HKID: A123456(3)
Sex: M Age: 19Y DOB: 01/07/1987
Hosp/Spec/Ward/Bed: TCH/SUR/A5/02
Doctor Request: Dr. Chan Wing
Dr. Ref.:

Lab No.: 07M0377791 Final Report URGENT
Date Collected: 13/03/07
Date Arrived: 13/03/07
Clinical Details: ? Fever
Specimen:- Sputum

Appearance: Purulent

Medical Microbiologist: Dr. LUK WAI KWANG
***** End of report *****
*This is a final report. Please retain in patient record permanently.

This Laboratory is accredited by the College of American Pathologists
CAP Accreditation Number 71755-25
Report on: 13/03/2007 17:37 Printed on 13/03/2007 17:37
Report Destination: KWH/SUR/PL Page No.: 1/1



MICROBIOLOGY (C&ST)

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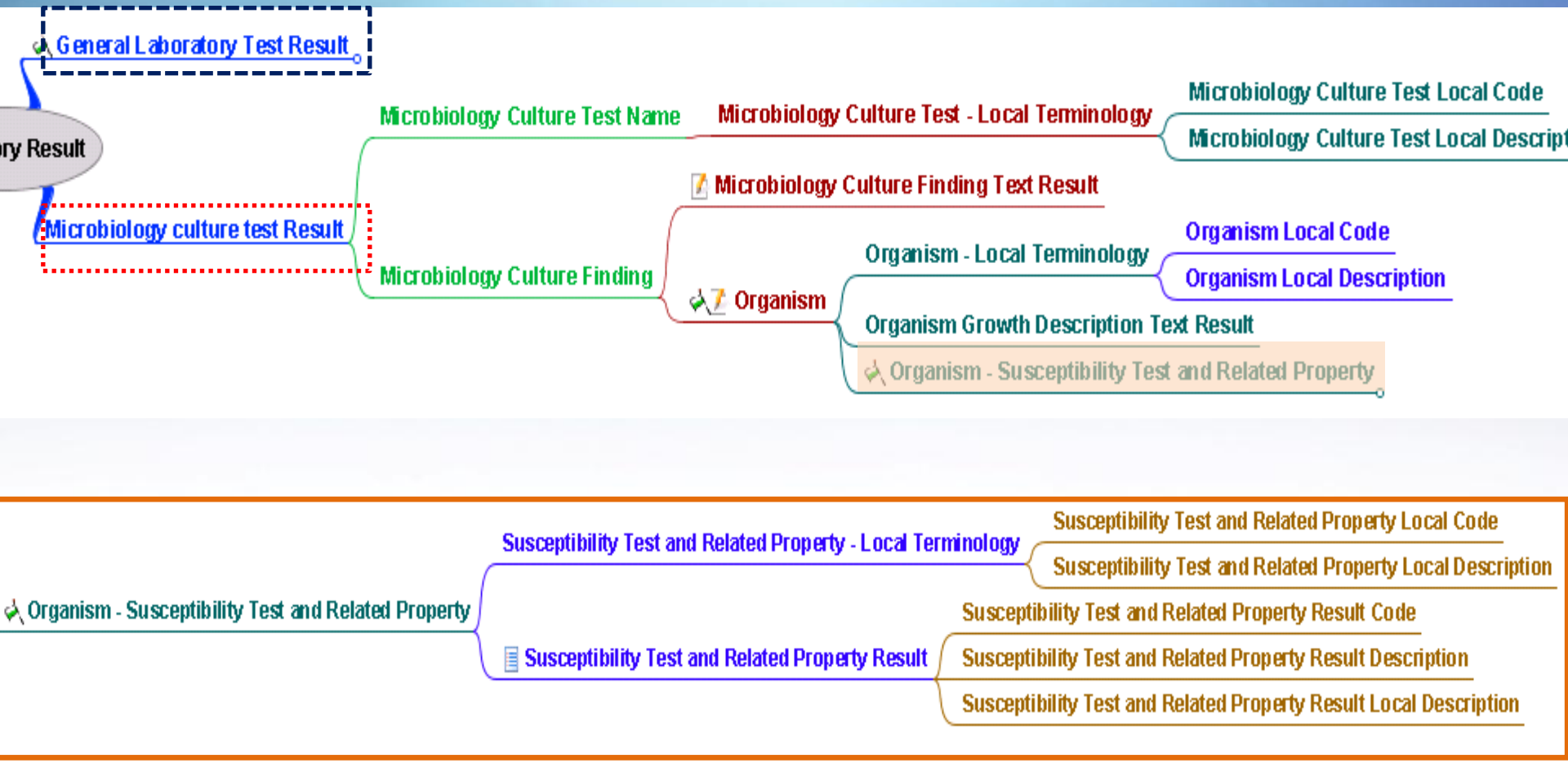
Microbiology C&ST – Level 2 Compliance



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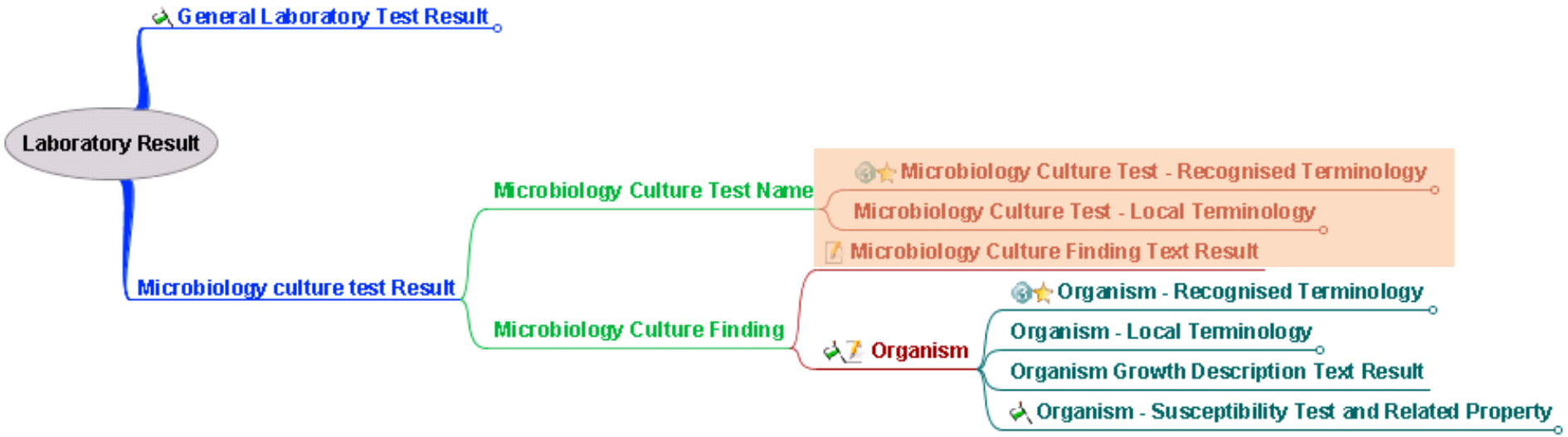
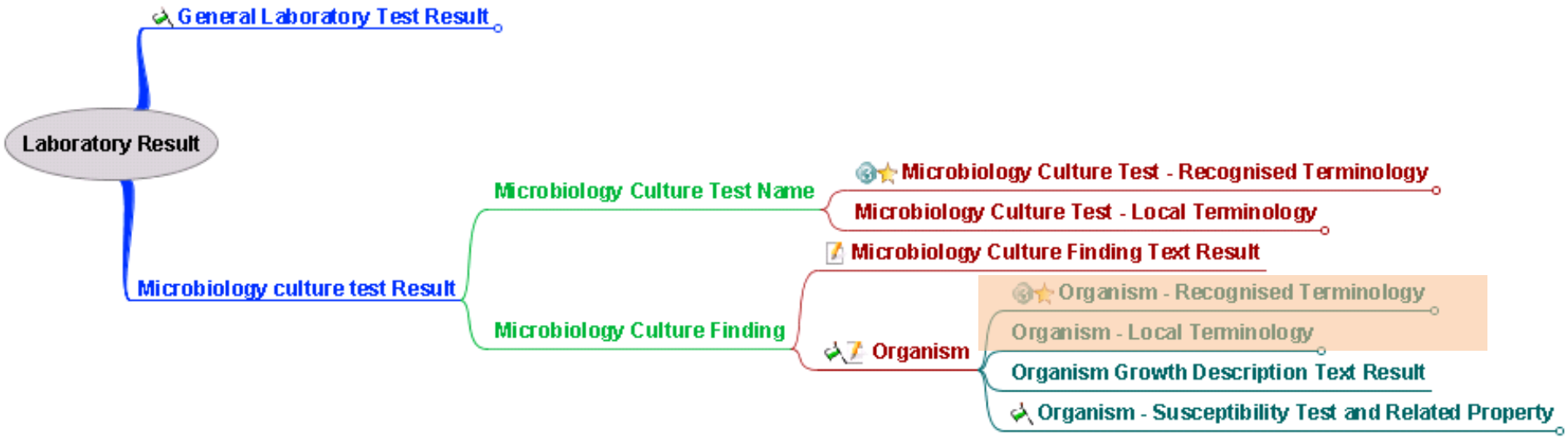
Structured Microbiology result with Local Description for level 2 data

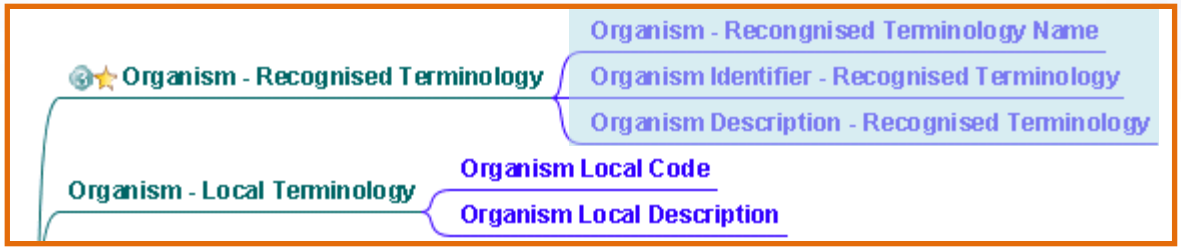
Microbiology C&ST – Level 3 Compliance



eHR Value	eHR Description	Allowable Values
HKCTT	Hong Kong Clinical Terminology Table	Nature = Lab. Test
LOINC	Logical Observation Identifiers Names and Codes	All values

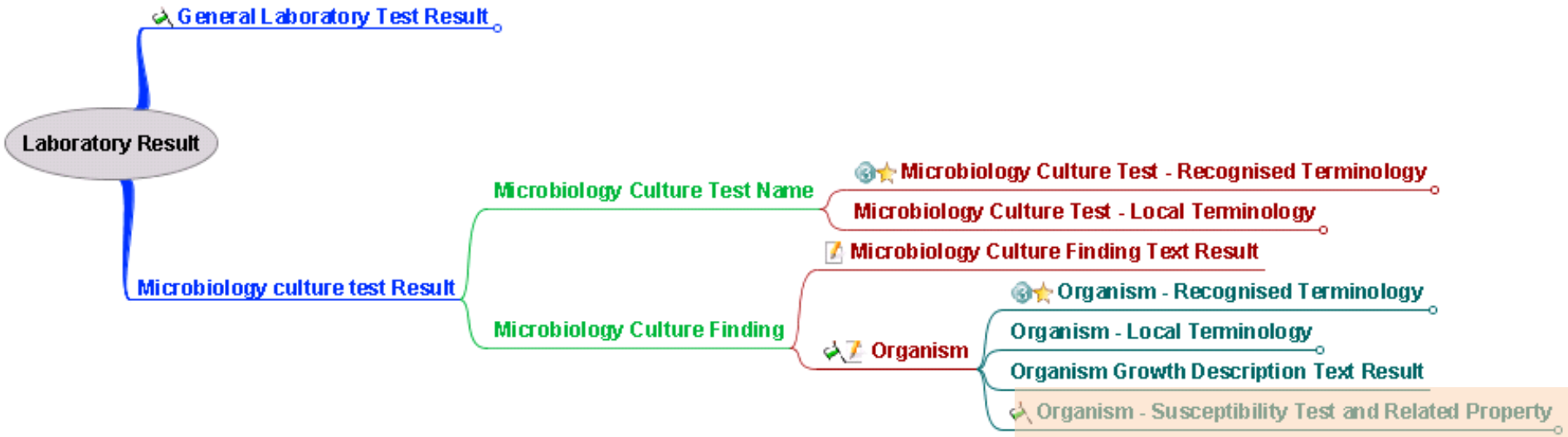
Microbiology C&ST – Level 3 Compliance (..2)

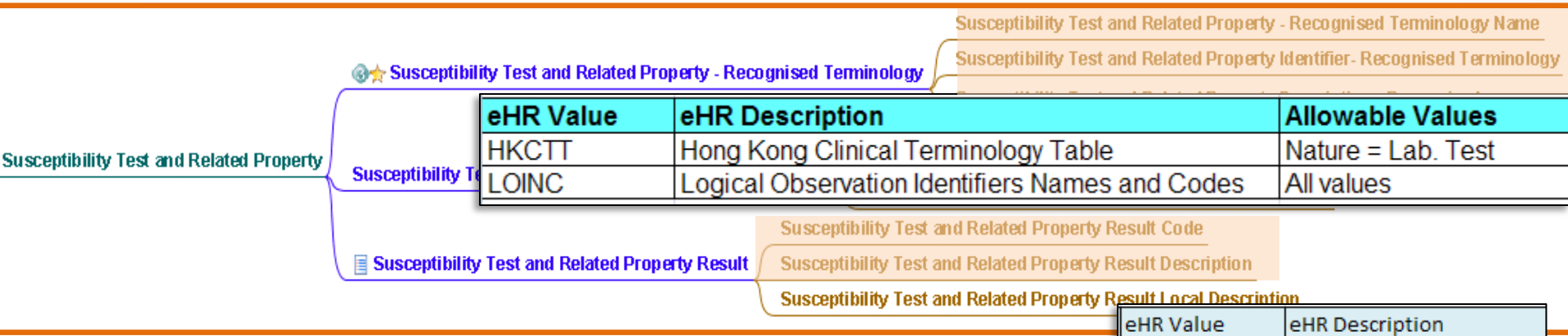




eHR Value	eHR Description	Allowable Values
HKCTT	Hong Kong Clinical Terminology Table	Nature = Organism
SNOMED CT	Systematized Nomenclature of Medicine - Clinical Terms	Hierarchy = Organism

Microbiology C&ST – Level 3 Compliance (..3)





eHR Value	eHR Description	Allowable Values
HKCTT	Hong Kong Clinical Terminology Table	Nature = Lab. Test
LOINC	Logical Observation Identifiers Names and Codes	All values

eHR Value	eHR Description
S	Sensitive
I	Intermediate
R	Resistant
P	Positive
N	Negative
U	Indetermine

Thank you

Appendix – codex (page 1 of 3)

Recognized terminology name - laboratory test

Purpose: to define the names of the recognized terminology for laboratory tests

eHR Value	eHR Description	Allowable Values
HKCTT	Hong Kong Clinical Terminology Table	Nature = Laboratory Test
LOINC	Logical Observation Identifiers Names and Codes	All values

Recognized terminology name - laboratory specimen

Purpose: to define the names of the recognized terminology for laboratory specimen

eHR Value	eHR Description	Allowable Values
HKCTT	Hong Kong Clinical Terminology Table	Nature = Specimen
SNOMED CT	Systematized Nomenclature of Medicine - Clinical Terms	Hierarchy = Specimen

Recognized terminology name - organism

Purpose: to define the names of the recognized terminology for organism

eHR Value	eHR Description	Allowable Values
HKCTT	Hong Kong Clinical Terminology Table	Nature = Organism
SNOMED CT	Systematized Nomenclature of Medicine - Clinical Terms	Hierarchy = Organism

Appendix – codex (page 2 of 3)

Laboratory category table

Purpose: To indicate the performing laboratory category

eHR Value	eHR Description
CHEM	Chemical Pathology Laboratory
HAEM	Haematology Laboratory
IMMUN	Immunology Laboratory
MICRO	Microbiology Laboratory
VIRO	Virology Laboratory
PATH	Anatomical Pathology Laboratory
TRL	Toxicology Reference Laboratory
BLDBK	Blood Bank
T&I	Transplantation & Immunogenetic Laboratory
MOLPATH	Molecular Pathology Laboratory
LAB	Clinical Laboratory

Abnormal result indicator table

Purpose: To indicate the laboratory test numeric result that is above or below the reference range of the test

eHR Value	eHR Description
L	Low
H	High

Appendix – codex (page 3 of 3)

Detection limit indicator table

Purpose: To indicate the laboratory test numeric result that is less than or greater than the detection limit of the test

Remark: Previouly called Out of range result indicator

eHR Value	eHR Description
<	Less than
>	Greater than

Susceptibility test and related property test result

Purpose: To indicate the result of antibioitc susceptibility test and related property of the isolated organism

eHR Value	eHR Description
S	Sensitive
I	Intermediate
R	Resistant
P	Positive
N	Negative
U	Indetermine

Laboratory report status

Purpose: To indicate the laboratory report reporting status

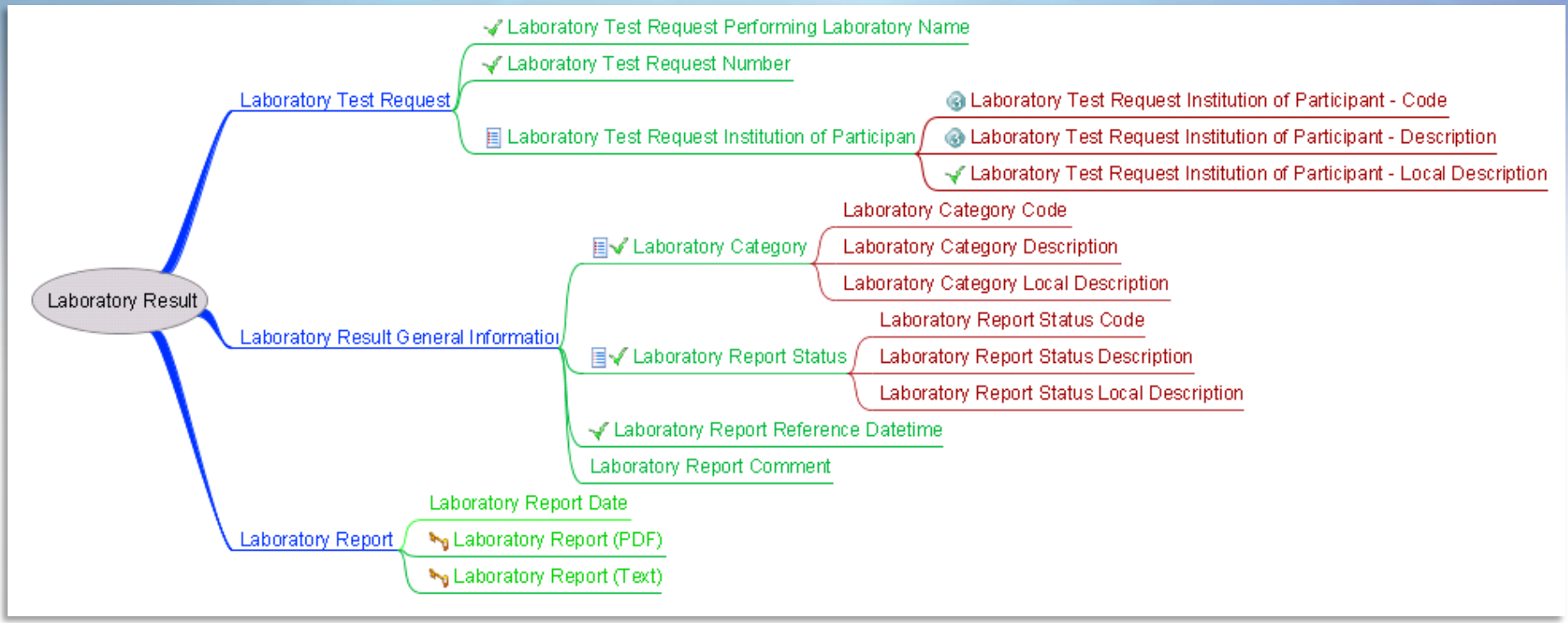
eHR Value	eHR Description
P	Provisional/Preliminary report
F	Final report
A	Amended report
S	Supplementary report

Appendix – mindmap and dataset navigation table

Report type	Compliance level		
	Level 1	Level 2	Level 3
General Lab Result		Esoteric tests only	
Microbiology (C&ST)			
Anatomical Pathology			Under development

Legend: Icon to Mindmap Icon to Dataset

Appendix – Laboratory result in level 1 (page 1 of 1)



Appendix – General laboratory result dataset (page 1 of 7)

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)
Laboratory result	Laboratory Test Request Performing Laboratory Name		Name of the laboratory which coordinates or produces the laboratory report.	ST	String				M	M	M	Kowloon Bay Clinical Laboratory	Kowloon Bay Clinical Laboratory	Kowloon Bay Clinical Laboratory
Laboratory result	Laboratory Test Request Number		A unique identifier assigned by the Laboratory Information System (LIS) of the performing laboratory to identify the request.	ST	String				M	M	M	11-CC123456	11-CC123456	11-CC123456
Laboratory result	Laboratory Test Request Institution of Participant - code		Identifier of the healthcare organisation of the patient's encounter who created the Laboratory Test Request for the patient at the instance.	CE	Coded element				O	O	M	KH	KH	KH
Laboratory result	Laboratory Test Request Institution of Participant - description		Description of the healthcare organisation of the patient's encounter who created the Laboratory Test Request for the patient at the instance. The [Laboratory Test Request Institution of Participant - description] should match with [Laboratory Test Request Institution of Participant - code].	ST	String				O	O	M	Kowloon Hospital	Kowloon Hospital	Kowloon Hospital
Laboratory result	Laboratory Test Request Institution of Participant - local description		Local description of the healthcare organisation of the patient's encounter who created the Laboratory Test Request for the patient at the instance. The [Laboratory Test Request Institution of Participant - local description] should match with [Laboratory Test Request Institution of Participant - code].	ST	String				M	M	M	Kowloon Hospital	Kowloon Hospital	Kowloon Hospital
Laboratory result	Laboratory Test Requesting Doctor		Name of the clinician who has requested the laboratory investigation/s in this section of the laboratory report	ST	String				NA	O	O		Dr. TM Chan	Dr. TM Chan
Laboratory result	Laboratory Test Request Clinical Information		This field contains clinical information about the patient, e.g. clinical findings, or specimen. The information will assist the laboratory to interpret the diagnostic studies.	ST	String				NA	O	O		? Ca Lung Fasting blood sample	? Ca Lung Fasting blood sample
Laboratory result	Panel Local Code		This is the requesting test / profile's abbreviations for the laboratory request, which is issued by the performing laboratory.	ST	String				NA	O	O		RFT	RFT
Laboratory result	Panel Local Description		This is the requesting test or profile description which is issued by the performing laboratory. This field describes the requested observation/test/profile	ST	String				NA	O	M		RFT	RFT
Laboratory result	Laboratory Category Code		eHR value of the "Laboratory Category" code table. A laboratory category code in which the laboratory report was produced.	CE	Coded Element			Laboratory category	M	M	M	CHEM	CHEM	CHEM

Appendix – General laboratory result dataset (page 2 of 7)

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)
Laboratory result	Laboratory Category Description		eHR description of the "Laboratory Category" code table A laboratory category description in which the laboratory report was produced. The [Laboratory Category Description] should match with [Laboratory Category Code].	ST	String			Laboratory category	M	M	M	Chemical Pathology Laboratory	Chemical Pathology Laboratory	Chemical Pathology Laboratory
Laboratory result	Laboratory Category Local Description		A laboratory category local description in which the laboratory report was produced. The [Laboratory Category Local Description] should match with [Laboratory Category Code].	ST	String				M	M	M	Clinical Chemistry Laboraotry	Clinical Chemistry Laboraotry	Clinical Chemistry Laboraotry
Laboratory result	Laboratory Report Status Code		eHR value of the "Laboratory Report Status" code table. Details see Report Status Description	CE	Coded Element			Laboratory report status	M	M	M	F	F	F
Laboratory result	Laboratory Report Status Description		eHR description of the "Laboratory Report Status" code table A description of a laboratory report reporting status. The status of the laboratory report, including : - Provisional Report (A provisional report is issued when provisional or partial results become available and report is submitted to eHR. A final report will always follow after the provisional report.) - Final Report (A completed report for the laboratory request.) - Amended Report (An Amended report is issued when the final report of diagnosis or test result(s) have been changed or amended. Amended report includes information with the latest submitted provisional report/final report/supplementary report.) - Supplementary Report (A supplementary report is issued when additional information is available when final/amended report has been submitted to eHR. Supplementary report includes information with the latest submitted provisional report/final report/amended report.) The [Laboratory Report Status	ST	String			Laboratory report status	M	M	M	Final report	Final report	Final report

Appendix – General laboratory report dataset (page 3 of 7)

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)
Laboratory result	Laboratory Report Status Local Description		A local descripiton of a laboratory report reporting status. The [Laboratory Report Status Local Description] should match with [Laboratory Report Status Code].	ST	String				M	M	M	Final	Final	Final
Laboratory result	Laboratory Report Reference Datetime		The reference date or datetime which is used to determine the display sequence of a specific laboratory report in the eHR. The laboratory reports are displayed in the eHR according to the following rule : i. Specimen collection datetime, if any ii. Specimen Arrival datetime, if any iii. Laboratory Request Registration datetime.	TS	Time Stamp				M	M	M	31/01/2011 4:30:00 PM	31/01/2011 4:30:00 PM	31/01/2011 4:30:00 PM
Laboratory result	Laboratory Report Authorized Healthcare Staff Identifier		A unique identifier of the healthcare staff who authorized the laboratory report	CE	Coded element		R		NA	NA	O			CHSML01
Laboratory result	Laboratory Report Authorized Healthcare Staff English Name Prefix		eHR value of the "Healthcare staff English name prefix" code table, to define the prefix of the English name of the healthcare staff who authorized the laboratory report	CE	Coded element		R	Healthcare staff English name prefix	NA	NA	O			P - Prof
Laboratory result	Laboratory Report Authorized Healthcare Staff English Surname		Surname name in English of the healthcare staff who authorized the laboratory report	ST	String		R		NA	O	O		Chan	Chan
Laboratory result	Laboratory Report Authorized Healthcare Staff English Given Name		Given name in English of the healthcare staff who authorized the laboratory report	ST	String		R		NA	O	O		Tai Man	Tai Man
Laboratory result	Laboratory Report Authorized Healthcare Staff Chinese Name		Full name in Chinese of the healthcare staff who authorized the laboratory report. Encoding method: unicode	ST	String		R		NA	O	O		陳大文	陳大文
Laboratory result	Laboratory Report Authorized Healthcare Staff Chinese Name Suffix		eHR value of the "Healthcare staff Chinese name suffix" code table, to define the suffix of the Chinese name of the healthcare staff who authorized the laboratory report	CE	Coded element		R	Healthcare staff Chinese name suffix	NA	NA	O			P - 教授
Laboratory result	Laboratory Report Authorized Datetime		The date or date and time in which the specific version of the laboratory report was authorized, which the report is ready to issue	TS	Time Stamp				NA	O	M		31/01/2011 4:30:00 PM	31/01/2011 4:30:00 PM
Laboratory result	Laboratory Report Comment		This field contains the comment entered for the laboratory report, which the comment is a report base in nature.	ST	String				O	O	O	Clinical Guideline Note: The goal of diabetes therapy should be an HbA1c level	Clinical Guideline Note: The goal of diabetes therapy should be an	Clinical Guideline Note: The goal of diabetes therapy should be an

Appendix – General laboratory report dataset (page 4 of 7)

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)
Laboratory result	Laboratory Report Date		The documentation date of the laboratory report	TS	Time Stamp				O	O	O	06/12/2010	06/12/2010	06/12/2010
Laboratory result	Laboratory Report (PDF)		The PDF document of the Laboratory Report	ED	Encapsulated data				M if [Laboratory Report (Text)]	O	O			
Laboratory result	Laboratory Report (Text)		The free text of the Laboratory Report	TX	Text				M If [Laboratory Report (PDF)] is blank	O	O			
Laboratory result	Specimen Site		This field describes the nature of the site of the specimen, which contains information of the specimen site in free text. For example, an anatomical site 'Left lower lobe', or any specimen qualifier in free text "Red cap of the Hickman line"	ST	String				NA	O	O		Left lower quadrant	Left lower quadrant
Laboratory result	Specimen Type - Recognised Terminology Name		Name of Recognised terminology set for Specimen Type	CE	Coded Element	If eHR value = HKCTT, allowable nature is "Specimen" If eHR value = SNOMED CT, allowable hierarchy is "Specimen"		Recognised terminology name - laboratory specimen	NA	NA	M if [Specimen Type Identifier - Recognised Terminology] is given NA if [Specimen Type Identifier - Recognised Terminology] is blank			SNOMED CT
Laboratory result	Specimen Type Identifier - Recognised Terminology		Unique identifier of Specimen Type in the recognised terminology	CE	Coded Element	[Specimen Type Identifier - Recognised Terminology] should be included in the selected recognised terminology of the "Recognised Terminology Name - Laboratory Specimen"			NA	NA	O			258497007
Laboratory result	Specimen Type Description - Recognised Terminology		Description of Specimen Type in the recognised terminology	CE	Coded Element	[Specimen Type Description - Recognised Terminology] should be matched with the corresponding description of the selected [Specimen Type Identifier - Recognised			NA	NA	M if [Specimen Type Identifier - Recognised Terminology] is given NA if [Specimen Type Identifier - Recognised Terminology] is blank			Abscess swab (specimen)

Appendix – General laboratory result dataset (page 5 of 7)

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)
Laboratory result	Specimen Type local code		Local code for the Specimen Type issued by the performing laboratory	ST	String				NA	O	O		S423	S423
Laboratory result	Specimen Type local description		Local description for the Specimen Type issued by the performing laboratory	ST	String				NA	O	M if [Specimen Type Identifier - Recognised Terminology] is given NA if [Specimen Type Identifier - Recognised Terminology] is blank		Wound Swab	Wound Swab
Laboratory result	Specimen Collection Datetime		The date and time when the specimen was collected.	TS	Time Stamp				NA	O	O		01/04/2012 2:00:00 PM	01/04/2012 2:00:00 PM
Laboratory result	Specimen Arrival Datetime		The specimen arrival date/time is the time that the specimen is received at the laboratory. The actual time that is recorded is based on how specimen receipt is managed and may correspond to the time the sample is logged in. This is different from Specimen-Collect Datetime.	TS	Time Stamp				NA	O	O		01/04/2012 2:00:00 PM	01/04/2012 2:00:00 PM
Laboratory result	Laboratory Test Name - Recognised Terminology Name		Name of Recognised terminology set for General Laboratory Test Name	CE	Coded Element	If eHR value = HKCTT, allowable nature is "Lab. Test" If eHR value = LOINC, allowable value is neglected	R	Recognised terminology name - laboratory test	NA	NA	M			LOINC
Laboratory result	Laboratory Test Name Identifier - Recognised Terminology		Unique identifier of General Laboratory Test Name in the recognised terminology	CE	Coded Element	[Laboratory Test Name Identifier - Recognised Terminology] should be included in the selected recognised terminology of the "Recognised Terminology Name -	R		NA	NA	M			2823-3
Laboratory result	Laboratory Test name Description - Recognised Terminology		Description of General Laboratory Test Name in the recognised terminology	CE	Coded Element	[Laboratory Test name Description - Recognised Terminology] should be matched with the corresponding description of the selected [Laboratory Test Name Identifier - Recognised	R		NA	NA	M			Potassium, Serum or Plasma

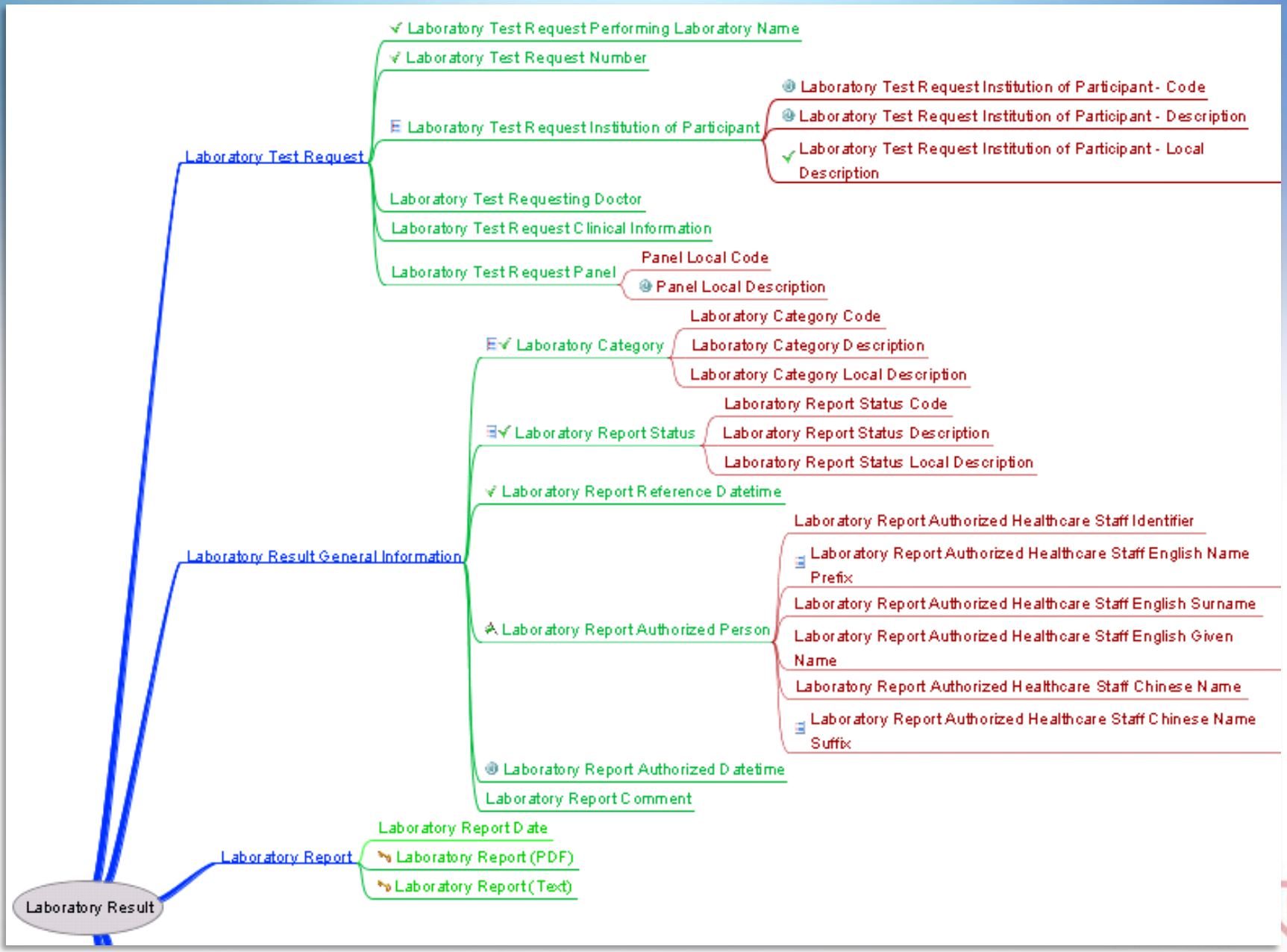
Appendix – General laboratory result dataset (page 6 of 7)

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)
Laboratory result	Laboratory Test Name Local Code		Local code for the General Laboratory Test name issued by the performing laboratory	ST	String		R		NA	O	O		K	K
Laboratory result	Laboratory Test Name Local Description		Local description for the General Laboratory Test name issued by the performing laboratory	ST	String		R		NA	M	M		Potassium	Potassium
Laboratory result	Laboratory Test Numeric Result		This field contains the value observed by the performing laboratory in a numerical format.	NM	Numeric		R		NA	M If [General Laboratory Test - Enumerated result AND General Laboratory Test - Text result] is blank	M If [General Laboratory Test - Enumerated result AND General Laboratory Test - Text		3.5	3.5
Laboratory result	Laboratory Test Enumerated Result		This field contains the enumerated result identifier by the performing laboratory, for example, - positive, negative - +, ++, +++ - present, absent	ST	String		R		NA	M If [General Laboratory Test - Numeric result result AND General Laboratory Test - Text result] is blank	M If [General Laboratory Test - Numeric result result AND General Laboratory Test - Text result] is blank		Not detected	Not detected
Laboratory result	Laboratory Test Reportable Result		This field contains the reporting result generated by the performing laboratory. It is a string type which is used to facilitate frontend display of all results in eHR.	ST	String		R		NA	M	M		>10.0	>10.0
Laboratory result	Detection Limit Indicator Code		eHR value of the "Detection Limit Indicator" code table. This field contains a code from a table lookup indicating whether the result is out of the detection limit of the test. e.g. < Less than; > Greater than	CE	Coded Element		R	Detection limit indicator	NA	O	O		<	<
Laboratory result	Detection Limit Indicator Description		eHR description of the "Detection Limit Indicator" code table. This field contains a description from a table lookup indicating whether the result is out of the detection limit of the test. The [Detection Limit Indicator Description] should match with [Detection Limit Indicator Code].	ST	String		R	Detection limit indicator	NA	O	O		Less than	Less than
Laboratory result	Detection Limit Indicator Local Description		This field contains a local description indicating whether the result is out of the detection limit of the test. The [Detection Limit Indicator Local Description] should match with [Detection Limit Indicator Code].	ST	String		R		NA	O	O		<<	<<

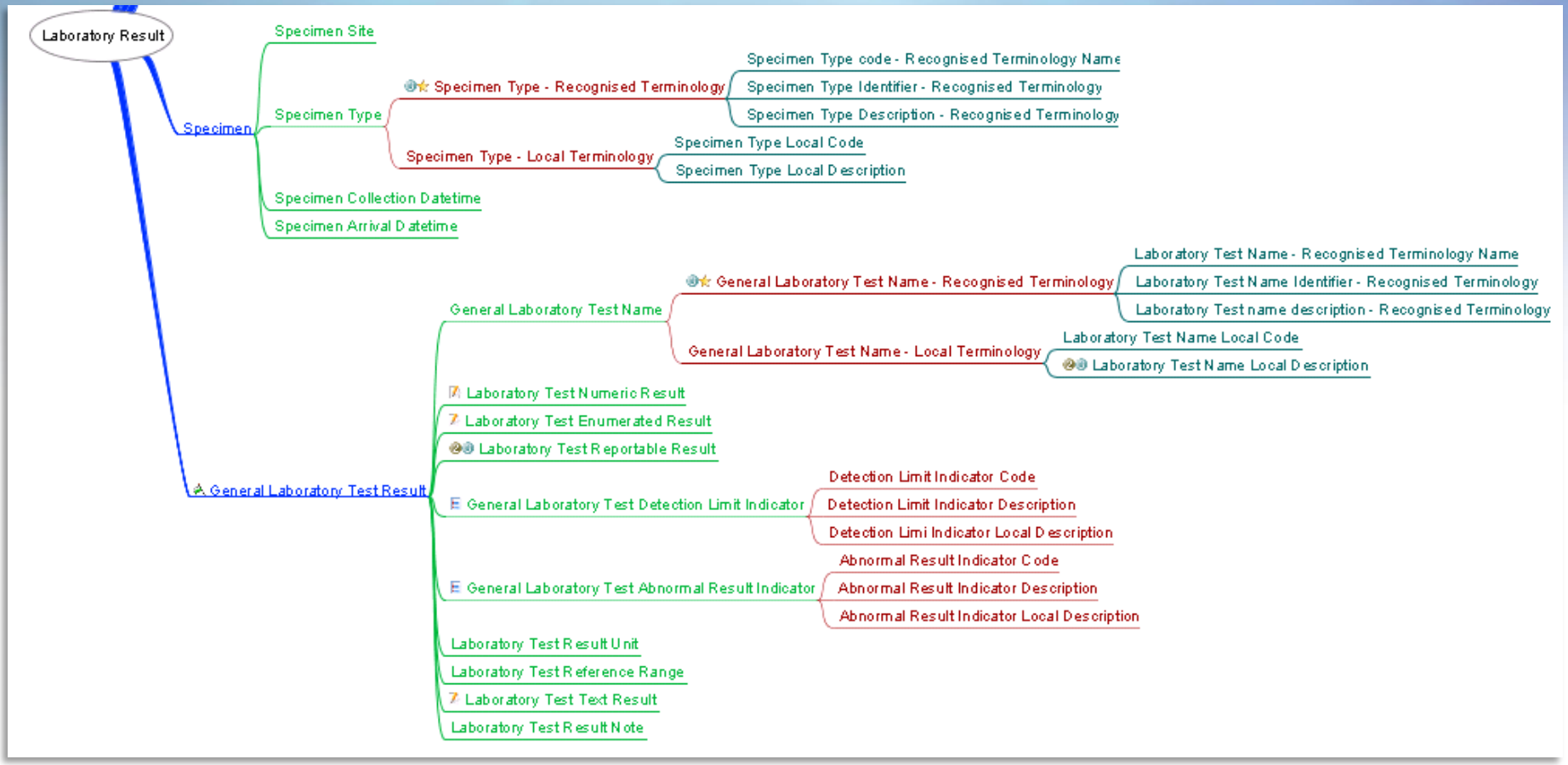
Appendix – General laboratory result dataset (page 7 of 7)

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)
Laboratory result	Abnormal Result Indicator Code		eHR value of the "Abnormal Result Indicator" code table. This field contains a code from a table lookup indicating the normality status of the result. e.g. L = Low; H = High	CE	Coded Element		R	Abnormal result indicator	NA	O	O		H	H
Laboratory result	Abnormal Result Indicator Description		eHR description of the "Abnormal Result Indicator" code table. This field contains a description from a table lookup indicating the normality status of the result. The [Abnormal Result Indicator Description] should match with [Abnormal Result Indicator Code].	ST	String		R	Abnormal result indicator	NA	O	O		High	High
Laboratory result	Abnormal Result Indicator Local Description		This field contains a local descrpition indicating the normality status of the result. The [Abnormal Result Indicator Local Description] should match with [Abnormal Result Indicator Code].	ST	String		R		NA	O	O		HH	HH
Laboratory result	Laboratory Test Result Unit		Local description of the test result unit.	ST	String		R		NA	O	O		mmol/L	mmol/L
Laboratory result	Laboratory Test Reference Range		Information about appropriate reference ranges for the specific result observable	ST	String		R		NA	O	O		3.0 - 5.2	LDL-chol (calc) - Acceptable Borderline High <2.8 2.8 - 3.3 >=3.4
Laboratory result	Laboratory Test Text Result		The laboratory test result observable value component in text format	TX	Text		R		NA	M if [General Laboratory Test - Enumerated result] AND [General Laboratory Test - numeric result] are blank	M if [General Laboratory Test - Enumerated result] AND [General Laboratory Test - numeric		Positive result	Positive result
Laboratory result	Laboratory Test Result Note		The note or remark of an individual test for the laboratory report, which it is test result based to give additional note on the test.	ST	String		R		NA	O	O		Test repeated	Test repeated

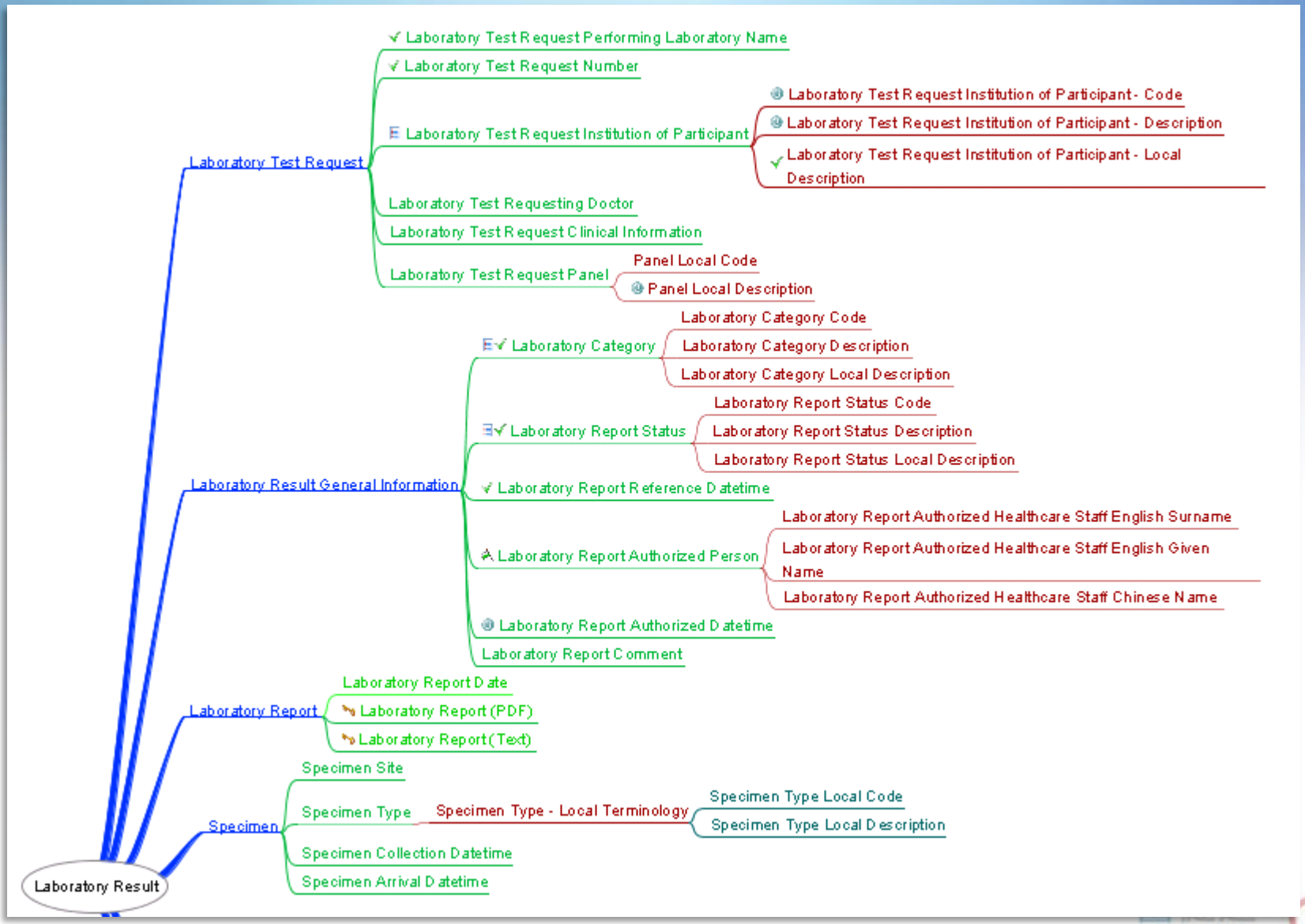
Appendix – General laboratory result in level 3 (page 1 of 2)



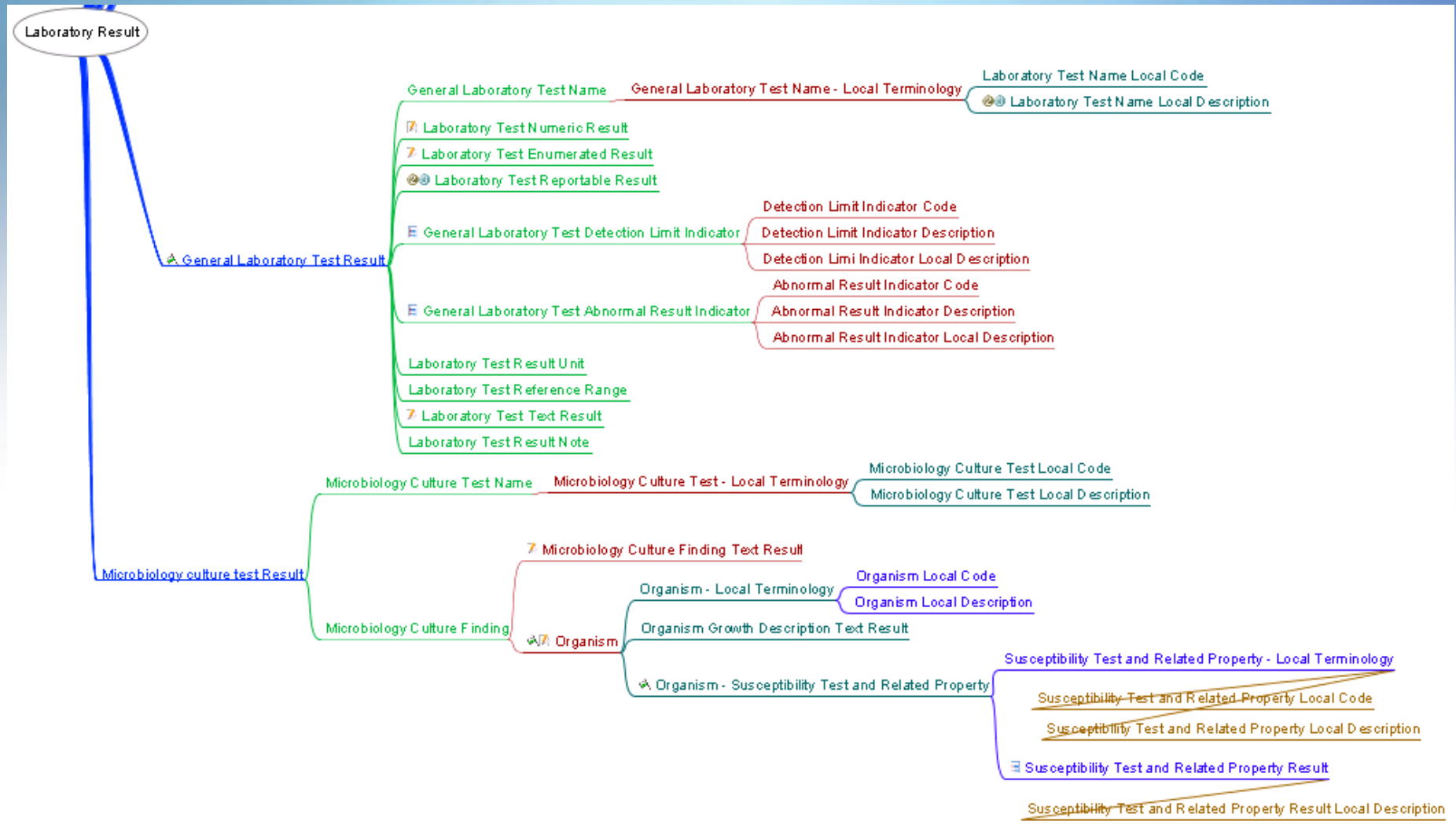
Appendix – General laboratory result in level 3 (part 2 of 2)



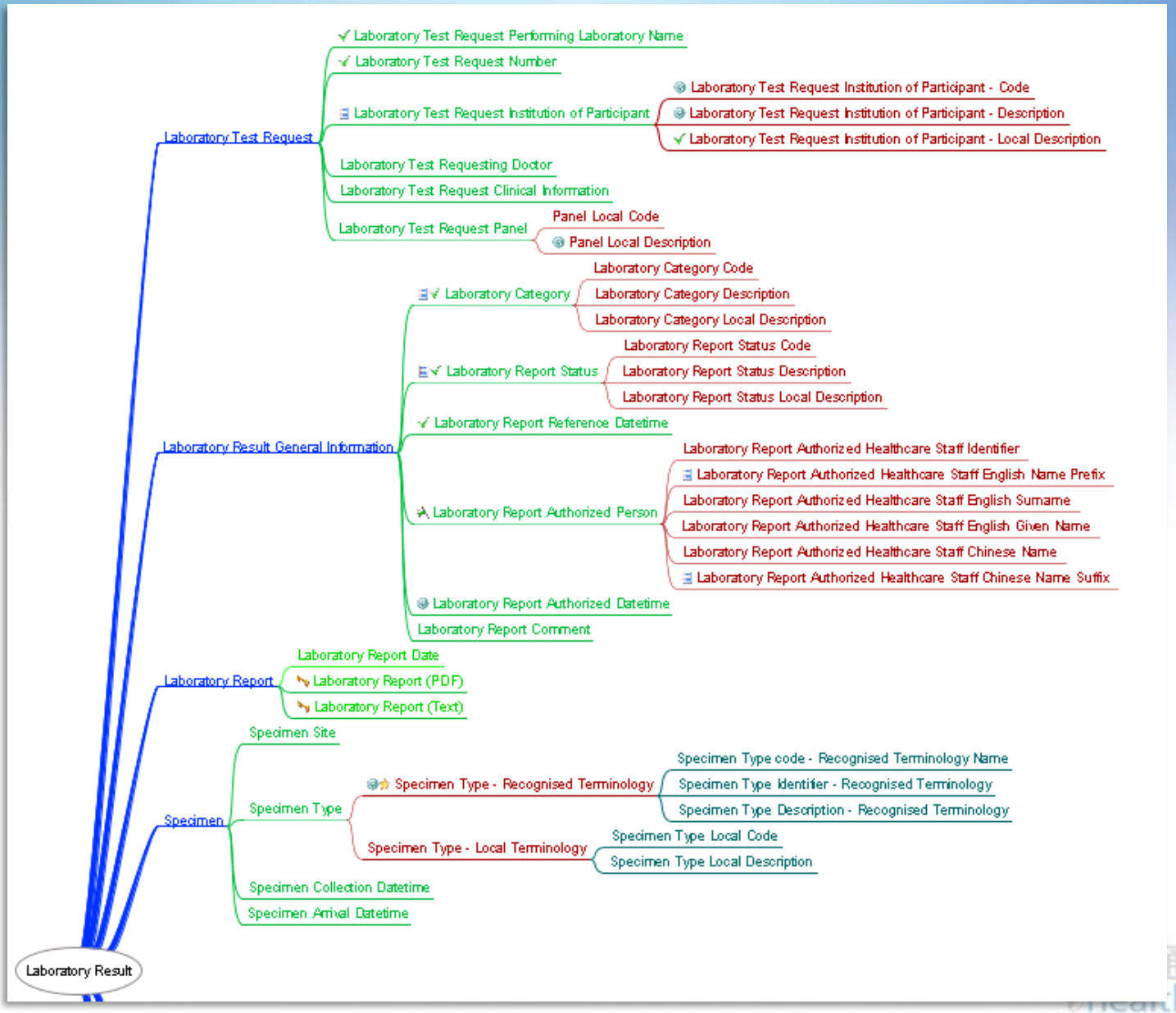
Appendix – Microbiology laboratory C&ST result in level 2 (page 1 of 2)



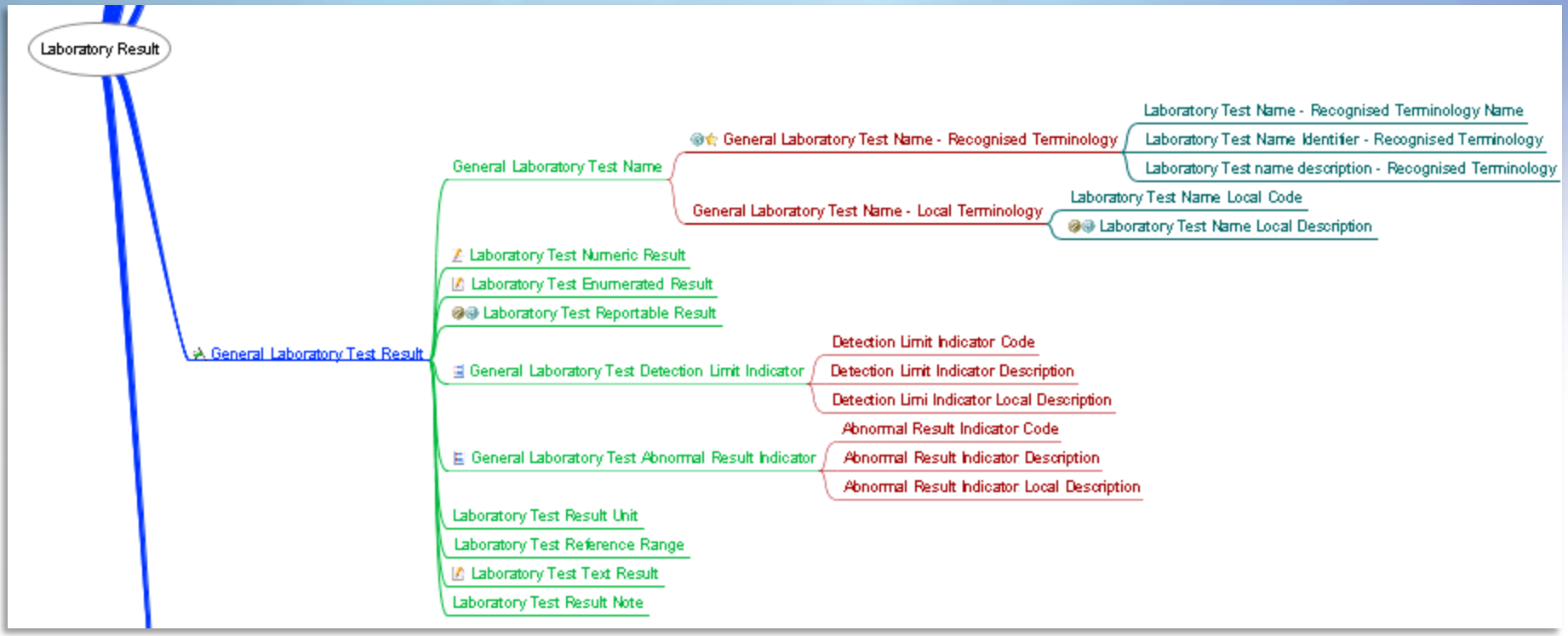
Appendix – Microbiology laboratory C&ST result in level 2 (page 2 of 2)



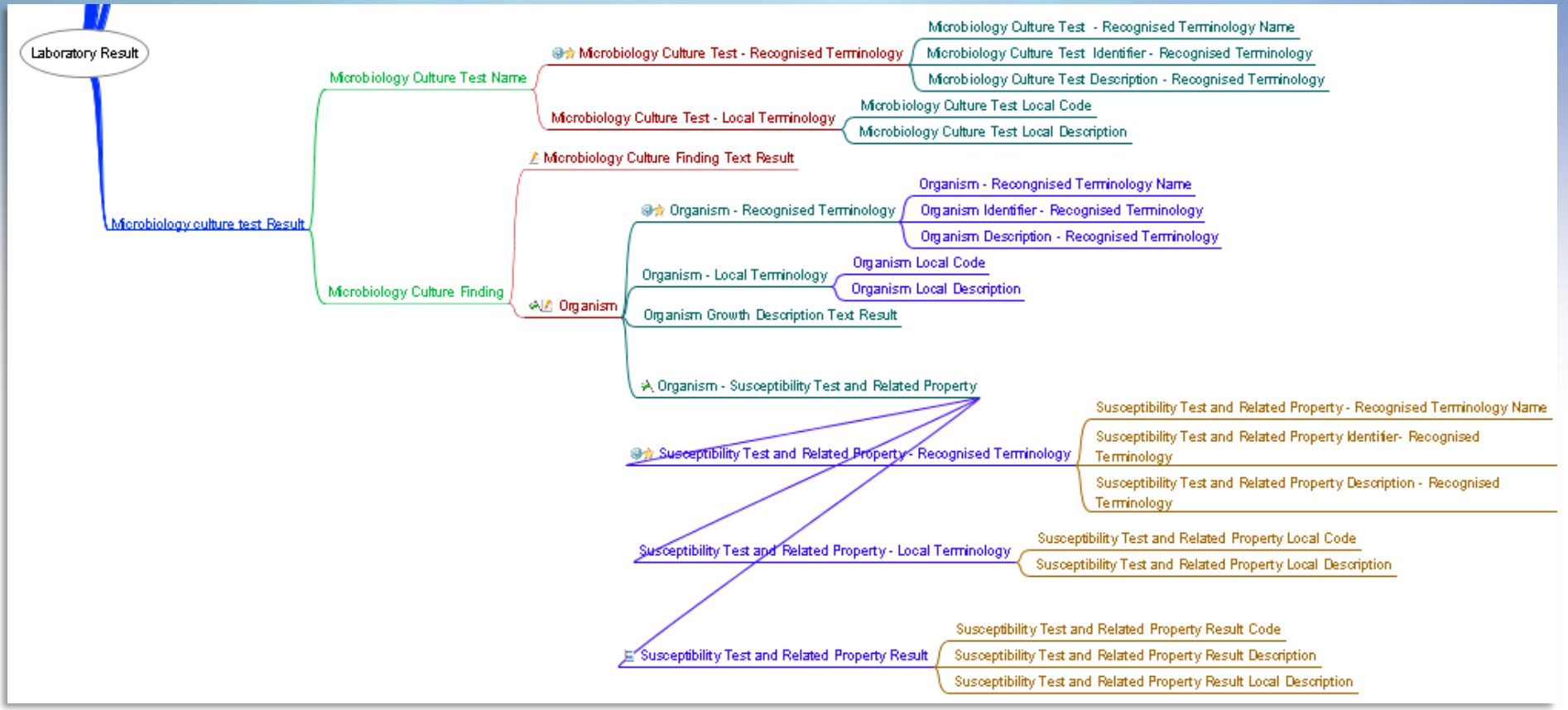
Appendix – Microbiology laboratory C&ST result in level 3 (page 1 of 3)



Appendix – Microbiology laboratory C&ST result in level 3 (page 2 of 3)



Appendix – Microbiology laboratory C&ST result in level 3 (page 3 of 3)



Appendix – Microbiology laboratory C&ST result dataset (page 1 of 13)

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)
Laboratory result	Laboratory Test Request Performing Laboratory Name		Name of the laboratory which coordinates or produces the laboratory report.	ST	String				M	M	M	Kowloon Bay Clinical Laboratory	Kowloon Bay Clinical Laboratory	Kowloon Bay Clinical Laboratory
Laboratory result	Laboratory Test Request Number		A unique identifier assigned by the Laboratory Information System (LIS) of the performing laboratory to identify the request.	ST	String				M	M	M	11-CC123456	11-CC123456	11-CC123456
Laboratory result	Laboratory Test Request Institution of Participant - code		Identifier of the healthcare organisation of the patient's encounter who created the Laboratory Test Request for the patient at the	CE	Coded element				O	O	M	KH	KH	KH
Laboratory result	Laboratory Test Request Institution of Participant - description		Description of the healthcare organisation of the patient's encounter who created the Laboratory Test Request for the patient at the instance. The [Laboratory Test Request Institution of Participant - description] should match with [Laboratory Test Request Institution of	ST	String				O	O	M	Kowloon Hospital	Kowloon Hospital	Kowloon Hospital
Laboratory result	Laboratory Test Request Institution of Participant - local description		Local description of the healthcare organisation of the patient's encounter who created the Laboratory Test Request for the patient at the instance. The [Laboratory Test Request Institution of Participant - local description] should match with [Laboratory Test Request Institution of Participant - code].	ST	String				M	M	M	Kowloon Hospital	Kowloon Hospital	Kowloon Hospital
Laboratory result	Laboratory Test Requesting Doctor		Name of the clinician who has requested the laboratory investigation/s in this section of the laboratory report	ST	String				NA	O	O		Dr. TM Chan	Dr. TM Chan
Laboratory result	Laboratory Test Request Clinical Information		This field contains clinical information about the patient, e.g. clinical findings, or specimen. The information will assist the laboratory to interpret the diagnostic studies.	ST	String				NA	O	O		? Ca Lung Fasting blood sample	? Ca Lung Fasting blood sample
Laboratory result	Panel Local Code		This is the requesting test / profile's abbreviations for the laboratory request, which is issued by the performing laboratory.	ST	String				NA	O	O		RFT	RFT
Laboratory result	Panel Local Description		This is the requesting test or profile description which is issued by the performing laboratory. This field describes the requested observation/test/profile	ST	String				NA	O	M		RFT	RFT
Laboratory result	Laboratory Category Code		eHR value of the "Laboratory Category" code table. A laboratory category code in which the laboratory report was produced.	CE	Coded Element			Laboratory category	M	M	M	CHEM	CHEM	CHEM
Laboratory result	Laboratory Category Description		eHR description of the "Laboratory Category" code table A laboratory category description in which the laboratory report was produced. The [Laboratory Category Description] should match with [Laboratory Category Code].	ST	String			Laboratory category	M	M	M	Chemical Pathology Laboratory	Chemical Pathology Laboratory	Chemical Pathology Laboratory

Appendix – Microbiology laboratory C&ST result dataset (page 2 of 13)

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)
Laboratory result	Laboratory Category Local Description		A laboratory category local description in which the laboratory report was produced. The [Laboratory Category Local Description] should match with [Laboratory Category	ST	String				M	M	M	Clinical Chemistry Laboraotry	Clinical Chemistry Laboraotry	Clinical Chemistry Laboraotry
Laboratory result	Laboratory Report Status Code		eHR value of the "Laboratory Report Status" code table. Details see Report Status Description	CE	Coded Element			Laboratory report status	M	M	M	F	F	F
Laboratory result	Laboratory Report Status Description		eHR description of the "Laboratory Report Status" code table A description of a laboratory report reporting status. The status of the laboratory report, including : - Provisional Report (A provisional report is issued when provisional or partial results become available and report is submitted to eHR. A final report will always follow after the provisional report.) - Final Report (A completed report for the laboratory request.) - Amended Report (An Amended report is issued when the final report of diagnosis or test result(s) have been changed or amended. Amended report includes information with the latest submitted provisional report/final report/supplementary report.) - Supplementary Report (A supplementary report is issued when additional information is available when final/amended report has been submitted to eHR. Supplementary report includes information with the latest submitted provisional report/final report/amended report.) The [Laboratory Report Status Description] should match with [Laboratory Report Status	ST	String			Laboratory report status	M	M	M	Final report	Final report	Final report
Laboratory result	Laboratory Report Status Local Description		A local descripiton of a laboratory report reporting status. The [Laboratory Report Status Local Description] should match with [Laboratory Report Status Code].	ST	String				M	M	M	Final	Final	Final
Laboratory result	Laboratory Report Reference Datetime		The reference date or datetime which is used to determine the display sequence of a specific laboratory report in the eHR. The laboratory reports are displayed in the eHR according to the following rule : i. Specimen collection datetime, if any ii. Specimen Arrival datetime, if any iii. Laboratory Request Registration	TS	Time Stamp				M	M	M	31/01/2011 4:30:00 PM	31/01/2011 4:30:00 PM	31/01/2011 4:30:00 PM

Appendix – Microbiology laboratory C&ST report dataset (page 3 of 13)

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)
Laboratory result	Laboratory Report Authorized Healthcare Staff Identifier		A unique identifier of the healthcare staff who authorized the laboratory report	CE	Coded element		R		NA	NA	O			CHSML01
Laboratory result	Laboratory Report Authorized Healthcare Staff English Name Prefix		eHR value of the "Healthcare staff English name prefix" code table, to define the prefix of the English name of the healthcare staff who authorized the laboratory report	CE	Coded element		R	Healthcare staff English name prefix	NA	NA	O			P - Prof
Laboratory result	Laboratory Report Authorized Healthcare Staff English Surname		Surname name in English of the healthcare staff who authorized the laboratory report	ST	String		R		NA	O	O		Chan	Chan
Laboratory result	Laboratory Report Authorized Healthcare Staff English Given Name		Given name in English of the healthcare staff who authorized the laboratory report	ST	String		R		NA	O	O		Tai Man	Tai Man
Laboratory result	Laboratory Report Authorized Healthcare Staff Chinese Name		Full name in Chinese of the healthcare staff who authorized the laboratory report. Encoding method: unicode	ST	String		R		NA	O	O		陳大文	陳大文
Laboratory result	Laboratory Report Authorized Healthcare Staff Chinese Name Suffix		eHR value of the "Healthcare staff Chinese name suffix" code table, to define the suffix of the Chinese name of the healthcare staff who authorized the laboratory report	CE	Coded element		R	Healthcare staff Chinese name	NA	NA	O			P - 教授
Laboratory result	Laboratory Report Authorized Datetime		The date or date and time in which the specific version of the laboratory report was authorized, which the report is ready to issue	TS	Time Stamp				NA	O	M		31/01/2011 4:30:00 PM	31/01/2011 4:30:00 PM
Laboratory result	Laboratory Report Comment		This field contains the comment entered for the laboratory report, which the comment is a report base in nature.	ST	String				O	O	O	Clinical Guideline Note: The goal of diabetes therapy should be an HbA1c level of <7%.	Clinical Guideline Note: The goal of diabetes therapy should be an HbA1c level of <7%.	Clinical Guideline Note: The goal of diabetes therapy should be an HbA1c level of <7%.
Laboratory result	Laboratory Report Date		The documentation date of the laboratory report	TS	Time Stamp				O	O	O	06/12/2010	06/12/2010	06/12/2010
Laboratory result	Laboratory Report (PDF)		The PDF document of the Laboratory Report	ED	Encapsulated data				M if [Laboratory Report (Text)] is blank	O	O			
Laboratory result	Laboratory Report (Text)		The free text of the Laboratory Report	TX	Text				M If [Laboratory Report (PDF)] is blank	O	O			
Laboratory result	Specimen Site		This field describes the nature of the site of the specimen, which contains information of the specimen site in free text. For example, an anatomical site 'Left lower lobe', or any specimen qualifier in free text "Red cap of the Hickman line"	ST	String				NA	O	O		Left lower quadrant	Left lower quadrant

Appendix – Microbiology laboratory C&ST report dataset (page 4 of 13)

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)
Laboratory result	Specimen Type - Recognised Terminology Name		Name of Recognised terminology set for Specimen Type	CE	Coded Element	If eHR value = HKCTT, allowable nature is "Specimen" If eHR value = SNOMED CT, allowable hierarchy is "Specimen"		Recognised terminology name - laboratory specimen	NA	NA	M if [Specimen Type Identifier - Recognised Terminology] is given NA if [Specimen Type Identifier - Recognised Terminology] is blank			SNOMED CT
Laboratory result	Specimen Type Identifier - Recognised Terminology		Unique identifier of Specimen Type in the recognised terminology	CE	Coded Element	[Specimen Type Identifier - Recognised Terminology] should be included in the selected recognised terminology of the "Recognised Terminology Name - Laboratory Specimen" code table.			NA	NA	O			258497007
Laboratory result	Specimen Type Description - Recognised Terminology		Description of Specimen Type in the recognised terminology	CE	Coded Element	[Specimen Type Description - Recognised Terminology] should be matched with the corresponding description of the selected [Specimen Type Identifier - Recognised Terminology]			NA	NA	M if [Specimen Type Identifier - Recognised Terminology] is given NA if [Specimen Type Identifier - Recognised Terminology] is blank			Absoess swab (specimen)

Appendix – Microbiology laboratory C&ST result dataset (page 5 of 13)

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)
Laboratory result	Specimen Type local code		Local code for the Specimen Type issued by the performing laboratory	ST	String				NA	O	O		S423	S423
Laboratory result	Specimen Type local description		Local description for the Specimen Type issued by the performing laboratory	ST	String				NA	O	M if [Specimen Type Identifier - Recognised Terminology] is given NA if [Specimen Type Identifier - Recognised Terminology] is blank		Wound Swab	Wound Swab
Laboratory result	Specimen Collection Datetime		The date and time when the specimen was collected.	TS	Time Stamp				NA	O	O		01/04/2012 2:00:00 PM	01/04/2012 2:00:00 PM
Laboratory result	Specimen Arrival Datetime		The specimen arrival date/time is the time that the specimen is received at the laboratory. The actual time that is recorded is based on how specimen receipt is managed and may correspond to the time the sample is logged in. This is different from Specimen-Collect Datetime.	TS	Time Stamp				NA	O	O		01/04/2012 2:00:00 PM	01/04/2012 2:00:00 PM
Laboratory result	Laboratory Test Name - Recognised Terminology Name		Name of Recognised terminology set for General Laboratory Test Name	CE	Coded Element	If eHR value = HKCTT, allowable nature is "Lab. Test" If eHR value = LOINC, allowable value is neglected	R	Recognised terminology name - laboratory test	NA	NA	M			LOINC
Laboratory result	Laboratory Test Name Identifier - Recognised Terminology		Unique identifier of General Laboratory Test Name in the recognised terminology	CE	Coded Element	[Laboratory Test Name Identifier - Recognised Terminology] should be included in the selected recognised terminology of the "Recognised Terminology Name - Laboratory Test" code	R		NA	NA	M			2823-3

Appendix – Microbiology laboratory C&ST result dataset (page 6 of 13)

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)
Laboratory result	Laboratory Test Name Local Code		Local code for the General Laboratory Test name issued by the performing laboratory	ST	String		R		NA	O	O		K	K
Laboratory result	Laboratory Test Name Local Description		Local description for the General Laboratory Test name issued by the performing	ST	String		R		NA	M	M		Potassium	Potassium
Laboratory result	Laboratory Test Numeric Result		This field contains the value observed by the performing laboratory in a numerical format.	NM	Numeric		R		NA	M If [General Laboratory Test - Enumerated result AND General Laboratory Test - Text result] is blank	M If [General Laboratory Test - Enumerated result AND General Laboratory Test - Text result] is blank		3.5	3.5
Laboratory result	Laboratory Test Enumerated Result		This field contains the enumerated result identifier by the performing laboratory, for example, - positive, negative - +, ++, +++ - present, absent	ST	String		R		NA	M If [General Laboratory Test - Numeric result result AND General Laboratory Test - Text result] is blank	M If [General Laboratory Test - Numeric result result AND General Laboratory Test - Text result] is blank		Not detected	Not detected
Laboratory result	Laboratory Test Reportable Result		This field contains the reporting result generated by the performing laboratory. It is a string type which is used to facilitate frontend display of all results in eHR.	ST	String		R		NA	M	M		>10.0	>10.0
Laboratory result	Detection Limit Indicator Code		eHR value of the "Detection Limit Indicator" code table. This field contains a code from a table lookup indicating whether the result is out of the detection limit of the test. e.g. < Less than; > Greater than	CE	Coded Element		R	Detection limit indicator	NA	O	O		<	<
Laboratory result	Detection Limit Indicator Description		eHR description of the "Detection Limit Indicator" code table. This field contains a description from a table lookup indicating whether the result is out of the detection limit of the test. The [Detection Limit Indicator Description] should match with [Detection Limit Indicator Code].	ST	String		R	Detection limit indicator	NA	O	O		Less than	Less than

Appendix – Microbiology laboratory C&ST report dataset (page 7 of 13)

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)
Laboratory result	Detection Limit Indicator Local Description		This field contains a local description indicating whether the result is out of the detection limit of the test. The [Detection Limit Indicator Local Description] should match with [Detection Limit Indicator Code].	ST	String		R		NA	O	O		<<	<<
Laboratory result	Abnormal Result Indicator Code		eHR value of the "Abnormal Result Indicator" code table. This field contains a code from a table lookup indicating the normality status of the result. e.g. L = Low; H = High	CE	Coded Element		R	Abnormal result indicator	NA	O	O		H	H
Laboratory result	Abnormal Result Indicator Description		eHR description of the "Abnormal Result Indicator" code table. This field contains a description from a table lookup indicating the normality status of the result. The [Abnormal Result Indicator Description] should match with [Abnormal Result Indicator Code].	ST	String		R	Abnormal result indicator	NA	O	O		High	High
Laboratory result	Abnormal Result Indicator Local Description		This field contains a local description indicating the normality status of the result. The [Abnormal Result Indicator Local Description] should match with [Abnormal Result Indicator Code].	ST	String		R		NA	O	O		HH	HH
Laboratory result	Laboratory Test Result Unit		Local description of the test result unit.	ST	String		R		NA	O	O		mmol/L	mmol/L
Laboratory result	Laboratory Test Reference Range		Information about appropriate reference ranges for the specific result observable	ST	String		R		NA	O	O		3.0 - 5.2	LDL-chol (calc) - Acceptable Borderline High <2.8 2.8 - 3.3 >=3.4
Laboratory result	Laboratory Test Text Result		The laboratory test result observable value component in text format	TX	Text		R		NA	M if [General Laboratory Test - Enumerated result] AND [General Laboratory Test - numeric result] are blank	M if [General Laboratory Test - Enumerated result] AND [General Laboratory Test - numeric result] are blank		Positive result	Positive result

Appendix – Microbiology laboratory C&ST report dataset (page 8 of 13)

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)
Laboratory result	Laboratory Test Result Note		The note or remark of an individual test for the laboratory report, which it is test result based to give additional note on the test. For example: Sodium test repeated	ST	String		R		NA	O	O		Test repeated	Test repeated
Laboratory Result	Microbiology Culture Test - Recognised Terminology Name		Name of Recognised terminology set for Microbiology Culture Test	CE	Coded Element	If eHR value = HKCTT, allowable nature is "Lab. Test" If eHR value = LOINC, allowable value is neglected		Recognised terminology name - laboratory test	NA	NA	M if [Microbiology Culture Test Identifier - Recognised Terminology] is given NA if [Microbiology Culture Test Identifier - Recognised Terminology] is blank			LOINC
Laboratory Result	Microbiology Culture Test Identifier - Recognised Terminology		Unique identifier of Microbiology Culture Test in the recognised terminology	CE	Coded Element	[Microbiology Culture Test Identifier - Recognised Terminology] should be included in the selected recognised terminology of the "Recognised Terminology Name - Laboratory Test" code table.			NA	NA	M			625-4
Laboratory Result	Microbiology Culture Test Description - Recognised Terminology		Description of Microbiology Culture Test in the recognised terminology	CE	Coded Element	[Microbiology Culture Test Description - Recognised Terminology] should be matched with the corresponding description of the selected [Microbiology Culture Test			NA	NA	M if [Microbiology Culture Test Identifier - Recognised Terminology] is given NA if [Microbiology Culture Test Identifier - Recognised Terminology] is blank			Bacteria identified in Stool by Culture

Appendix – Microbiology laboratory C&ST result dataset (page 9 of 13)

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)
Laboratory Result	Microbiology Culture Test Local Code		Local code for the Microbiology Culture Test issued by the performing laboratory	ST	String				NA	O	O		STL_ORG	STL_ORG
Laboratory Result	Microbiology Culture Test Local Description		Local description for the Microbiology Culture Test issued by the performing laboratory	ST	String				NA	M	M if [Microbiology Culture Test Identifier - Recognised Terminology] is given NA if [Microbiology Culture Test Identifier - Recognised Terminology] is blank		Stool culture	Stool culture
Laboratory Result	Microbiology Culture Finding Text Result		This field contain the laboratory finding of a microbiology culture test in string	ST	String				NA	M if [Organism Local description] is blank	M if [Organism Identifier - Recognised Terminology] is blank		Heavy mixed growth with normal flora	Heavy mixed growth with normal flora
Laboratory Result	Organism - Recognised Terminology Name		Name of Recognised terminology set of Organism	CE	Coded Element	If eHR value = HKCTT, allowable nature is "Organism" If eHR value = SNOMED CT, allowable hierarchy is "Organism"	R	Recognised terminology name - organism	NA	NA	M if [Organism Identifier - Recognised Terminology] is given NA if [Organism Identifier - Recognised Terminology] is blank			SNOMED CT
Laboratory Result	Organism Identifier - Recognised Terminology		Unique identifier of Organism in the recognised terminology	CE	Coded Element	[Organism Identifier - Recognised Terminology] should be included in the selected recognised terminology of the "Recognised	R		NA	NA	M if [Microbiology Culture Finding - Text Result] is blank			112283007

Appendix – Microbiology laboratory C&ST report dataset (page 10 of 13)

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)
Laboratory Result	Organism Description - Recognised Terminology		Description of Organism in the recognised terminology	CE	Coded Element	[Organism Description - Recognised Terminology] should be matched with the correspondin g description of the selected [Organism Identifier - Recognised Terminology]	R		NA	NA	M if [Organism Identifier - Recognised Terminology] is given NA if [Organism Identifier - Recognised Terminology] is blank			Escherichia coli (organism)
Laboratory Result	Organism Local Code		Local code for the organism issued by the performing laboratory	ST	String		R		NA	O	O		EC	EC
Laboratory Result	Organism Local Description		Local description for the organism issued by the performing laboratory	ST	String		R		NA	M if [Microbiolog y Culture Finding - Text Result] is blank	M if [Organism Identifier - Recognised Terminology] is given NA if [Organism Identifier - Recognised Terminology] is blank		Eschericia coli	Eschericia coli
Laboratory Result	Organism Growth Description Text Result		This field contain the growth description of the isolated organism in string	ST	String		R		NA	O	O		Heavy growth	Heavy growth
Laboratory Result	Susceptibility Test and Related Property - Recognised Terminology Name		Name of Recognised terminology set for Susceptibility Test and Related Property	CE	Coded Element	If eHR value = HKCTT, allowable nature is "Lab. Test" If eHR value = LOINC, allowable value is neglected	R	Recognise d terminolog y name - laboratory test	NA	NA	M if [Susceptibility Test and Related Property Identifier - Recognised Terminology] is given. NA if [Susceptibility Test and Related Property Identifier - Recognised Terminology] is blank			LOINC

Appendix – Microbiology laboratory C&ST report dataset (page 11 of 13)

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)
Laboratory Result	Susceptibility Test and Related Property Identifier - Recognised Terminology		Unique identifier of Susceptibility Test and Related Property in the recognised terminology	CE	Coded Element	[Susceptibility Test and Related Property Identifier - Recognised Terminology] should be included in the selected recognised terminology of the "Recognised Terminology Name - Laboratory Test" code table.	R		NA	NA	O			18860-7
Laboratory Result	Susceptibility Test and Related Property Description - Recognised Terminology		Description of Susceptibility Test and Related Property in the recognised terminology	CE	Coded Element	[Susceptibility Test and Related Property Description - Recognised Terminology] should be matched with the corresponding description of the selected [Susceptibility Test and Related Property Identifier - Recognised Terminology]	R		NA	NA	M if [Susceptibility Test and Related Property Identifier - Recognised Terminology] is given. NA if [Susceptibility Test and Related Property Identifier - Recognised Terminology] is blank			Amikacin [Susceptibility]
Laboratory Result	Susceptibility Test and Related Property Local Code		Local code for the Susceptibility Test and Related Property issued by the performing laboratory A Susceptibility Test and Related Property is considered as a reflex test when pathogenic organism was isolated. Generally, antibiotic susceptibility test/antibiotic sensitivity test are always included. Antibioitc resistant property related test include but not limit to	ST	String		R		NA	O	O		AMK	AMK

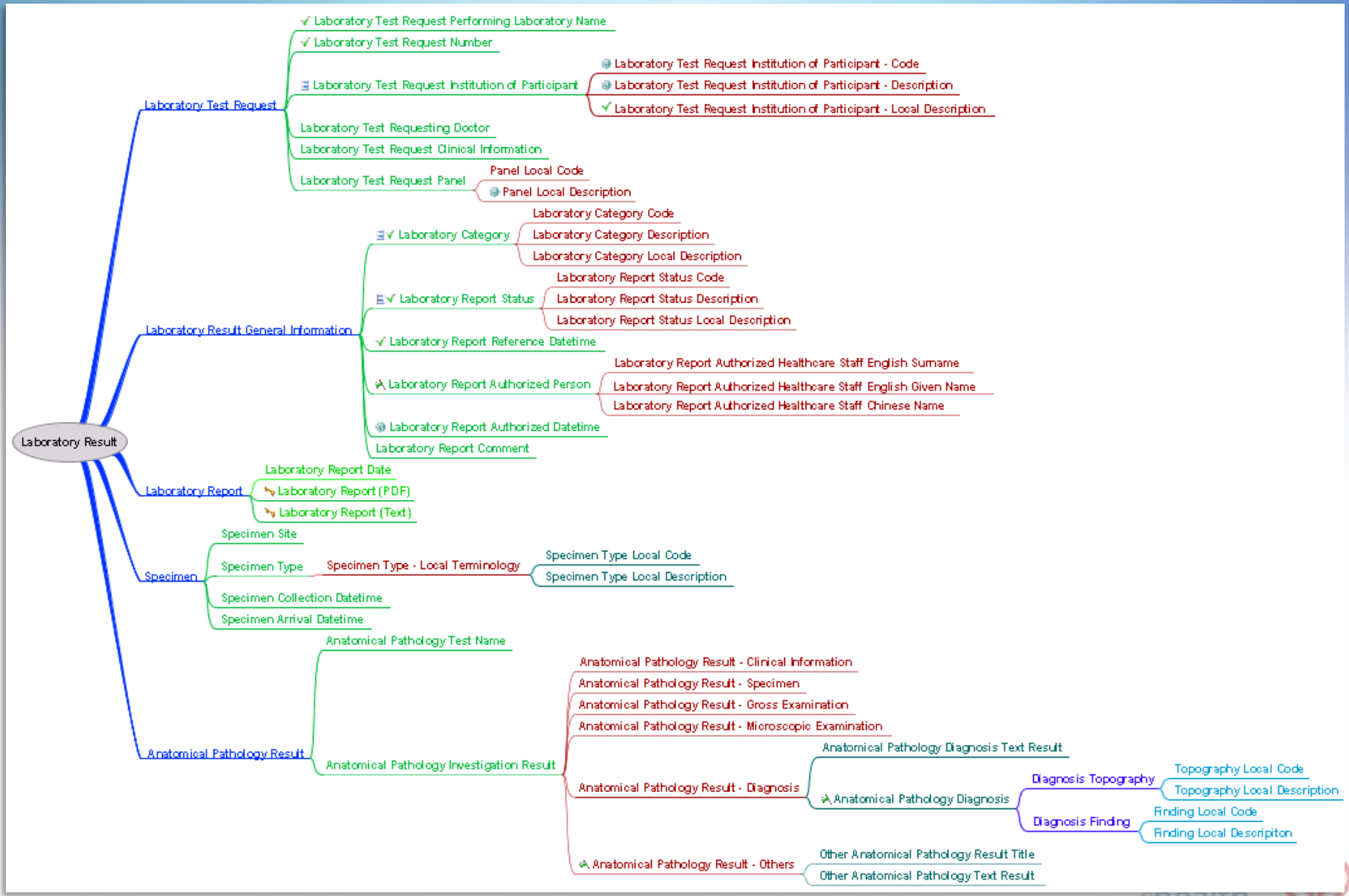
Appendix – Microbiology laboratory C&ST result dataset (page 12 of 13)

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)
Laboratory Result	Susceptibility Test and Related Property Local Description		Local description for the Susceptibility Test and Related Property issued by the performing laboratory A Susceptibility Test and Related Property is considered as a reflex test when pathogenic organism was isolated. Generally, antibiotic susceptibility test/antibiotic sensitivity test are always included. Antibioitc resistant property related test include but not limit to -Double disc synergy testing on extended spectrum beta lactamase production -Cefinase disc detection on production of Beta-lactamase -Antibiotic resistane gene detected by molecular technology	ST	String		R		NA	O	M if [Susceptibility Test and Related Property Identifier - Recognised Terminology] is given. NA if [Susceptibility Test and Related Property Identifier - Recognised Terminology] is blank		Amikacin	Amikacin
Laboratory Result	Susceptibility Test and Related Property Result Code		eHR value of the "Susceptibility Test and Related Property Result " code table	CE	Coded Element		R	Susceptibility test and related property result	NA	NA	M if [Susceptibility Test and Related Property Identifier - Recognised Terminology] is given NA if [Susceptibility Test and Related Property Identifier - Recognised Terminology] is blank			I
Laboratory Result	Susceptibility Test and Related Property Result Description		eHR description of the "Susceptibility Test and Related Property Result " code table The [Susceptibility Test and Related Property Result Description] should match with [Susceptibility Test and Related Property Result Code].	ST	String		R	Susceptibility test and related property result	NA	NA	M if [Susceptibility Test and Related Property Result Code] is given			Intemediate

Appendix – Microbiology laboratory C&ST result dataset (page 13 of 13)

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)
Laboratory Result	Susceptibility Test and Related Property Result Local Description		Local description of Susceptibility Test and Related Property result A Susceptibility Test and Related Property must had a interperted result and should be reported in together The [Susceptibility Test and Related Property Result Local Description] should match with [Susceptibility Test and Related Property Result Code].	ST	String		R		NA	O	M if [Susceptibility Test and Related Property Result Code] is given		Moderate	Moderate

Appendix – Anatomical pathology result in level 2 (page 1 of 1)



Appendix – Anatomical pathology report dataset (page 1 of 6)

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)
Laboratory result	Laboratory Test Request Performing Laboratory Name		Name of the laboratory which coordinates or produces the laboratory report.	ST	String				M	M	Under Development	Kowloon Bay Clinical Laboratory	Kowloon Bay Clinical Laboratory	Under Development
Laboratory result	Laboratory Test Request Number		A unique identifier assigned by the Laboratory Information System (LIS) of the performing laboratory to identify the request.	ST	String				M	M		11-CC123456	11-CC123456	
Laboratory result	Laboratory Test Request Institution of Participant - code		Identifier of the healthcare organisation of the patient's encounter who created the Laboratory Test Request for the patient at the instance.	CE	Coded element				O	O		KH	KH	
Laboratory result	Laboratory Test Request Institution of Participant - description		Description of the healthcare organisation of the patient's encounter who created the Laboratory Test Request for the patient at the instance. The [Laboratory Test Request Institution of Participant - description] should match with [Laboratory Test Request Institution of Participant - code].	ST	String				O	O		Kowloon Hospital	Kowloon Hospital	
Laboratory result	Laboratory Test Request Institution of Participant - local description		Local description of the healthcare organisation of the patient's encounter who created the Laboratory Test Request for the patient at the instance. The [Laboratory Test Request Institution of Participant - local description] should match with [Laboratory Test Request Institution of Participant - code].	ST	String				M	M		Kowloon Hospital	Kowloon Hospital	
Laboratory result	Laboratory Test Requesting Doctor		Name of the clinician who has requested the laboratory investigation/s in this section of the laboratory report	ST	String				NA	O			Dr. TM Chan	
Laboratory result	Laboratory Test Request Clinical Information		This field contains clinical information about the patient, e.g. clinical findings, or specimen. The information will assist the laboratory to interpret the diagnostic studies.	ST	String				NA	O			? Ca Lung Fasting blood sample	
Laboratory result	Panel Local Code		This is the requesting test / profile's abbreviations for the laboratory request, which is issued by the performing laboratory.	ST	String				NA	O			RFT	
Laboratory result	Panel Local Description		This is the requesting test or profile description which is issued by the performing laboratory. This field describes the requested observation/test/profile	ST	String				NA	O			RFT	
Laboratory result	Laboratory Category Code		eHR value of the "Laboratory Category" code table. A laboratory category code in which the laboratory report was produced.	CE	Coded Element			Laboratory category	M	M		CHEM	CHEM	

Appendix – Anatomical pathology result dataset (page 2 of 6)

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)
Laboratory result	Laboratory Category Description		eHR description of the "Laboratory Category" code table A laboratory category description in which the laboratory report was produced. The [Laboratory Category Description] should match with [Laboratory Category Code].	ST	String			Laboratory category	M	M	Under Development	Chemical Pathology Laboratory	Chemical Pathology Laboratory	Under Development
Laboratory result	Laboratory Category Local Description		A laboratory category local description in which the laboratory report was produced. The [Laboratory Category Local Description] should match with [Laboratory Category Code].	ST	String				M	M		Clinical Chemistry Laboratory	Clinical Chemistry Laboratory	
Laboratory result	Laboratory Report Status Code		eHR value of the "Laboratory Report Status" code table. Details see Report Status Description	CE	Coded Element			Laboratory report status	M	M		F	F	
Laboratory result	Laboratory Report Status Description		eHR description of the "Laboratory Report Status" code table A description of a laboratory report reporting status. The status of the laboratory report, including : - Provisional Report (A provisional report is issued when provisional or partial results become available and report is submitted to eHR. A final report will always follow after the provisional report.) - Final Report (A completed report for the laboratory request.) - Amended Report (An Amended report is issued when the final report of diagnosis or test result(s) have been changed or amended. Amended report includes information with the latest submitted provisional report/final report/supplementary report.) - Supplementary Report (A supplementary report is issued when additional information is available when final/amended report has been submitted to eHR. Supplementary report includes information with the latest submitted provisional report/final report/amended report.)	ST	String			Laboratory report status	M	M		Final report	Final report	
Laboratory result	Laboratory Report Status Local Description		A local descripiton of a laboratory report reporting status. The [Laboratory Report Status Local Description] should match with [Laboratory Report Status Code].	ST	String				M	M		Final	Final	

Appendix – Anatomical pathology result dataset (page 3 of 6)

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)
Laboratory result	Laboratory Report Reference Datetime		The reference date or datetime which is used to determine the display sequence of a specific laboratory report in the eHR. The laboratory reports are displayed in the eHR according to the following rule : i. Specimen collection datetime, if any ii. Specimen Arrival datetime, if any iii. Laboratory Request Registration datetime.	TS	Time Stamp				M	M	Under Development	31/01/2011 4:30:00 PM	31/01/2011 4:30:00 PM	Under Development
Laboratory result	Laboratory Report Authorized Healthcare Staff Identifier		A unique identifier of the healthcare staff who authorized the laboratory report	CE	Coded element		R		NA	NA				
Laboratory result	Laboratory Report Authorized Healthcare Staff English Name Prefix		eHR value of the "Healthcare staff English name prefix" code table, to define the prefix of the English name of the healthcare staff who authorized the laboratory report	CE	Coded element		R	Healthcare staff English name prefix	NA	NA				
Laboratory result	Laboratory Report Authorized Healthcare Staff English Surname		Surname name in English of the healthcare staff who authorized the	ST	String		R		NA	O			Chan	
Laboratory result	Laboratory Report Authorized Healthcare Staff English Given Name		Given name in English of the healthcare staff who authorized the laboratory report	ST	String		R		NA	O			Tai Man	
Laboratory result	Laboratory Report Authorized Healthcare Staff Chinese Name		Full name in Chinese of the healthcare staff who authorized the laboratory report. Encoding method: unicode	ST	String		R		NA	O			陳大文	
Laboratory result	Laboratory Report Authorized Healthcare Staff Chinese Name Suffix		eHR value of the "Healthcare staff Chinese name suffix" code table, to define the suffix of the Chinese name of the healthcare staff who authorized the laboratory report	CE	Coded element		R	Healthcare staff Chinese name suffix	NA	NA				
Laboratory result	Laboratory Report Authorized Datetime		The date or date and time in which the specific version of the laboratory report was authorized, which the report is ready to issue	TS	Time Stamp				NA	O			31/01/2011 4:30:00 PM	
Laboratory result	Laboratory Report Comment		This field contains the comment entered for the laboratory report, which the comment is a report base in nature.	ST	String				O	O		Clinical Guideline Note: The goal of diabetes therapy should be an HbA1c	Clinical Guideline Note: The goal of diabetes therapy should be an HbA1c level of <7%.	
Laboratory result	Laboratory Report Date		The documentation date of the laboratory report	TS	Time Stamp				O	O		06/12/2010	06/12/2010	
Laboratory result	Laboratory Report (PDF)		The PDF document of the Laboratory Report	ED	Encapsulated data				M if [Laboratory Report (Text)] is blank	O				
Laboratory result	Laboratory Report (Text)		The free text of the Laboratory Report	TX	Text				M If [Laboratory Report (PDF)] is blank	O				

Appendix – Anatomical pathology result dataset (page 4 of 6)

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)
Laboratory result	Specimen Site		This field describes the nature of the site of the specimen, which contains information of the specimen site in free text. For example, an anatomical site 'Left lower lobe', or any specimen qualifier in free text "Red cap of the Hickman line"	ST	String				NA	O	Under Development		Left lower quadrant	Under Development
Laboratory result	Specimen Type - Recognised Terminology Name		Name of Recognised terminology set for Specimen Type	CE	Coded Element	If eHR value = HKCTT, allowable nature is "Specimen" If eHR value = SNOMED CT, allowable hierarchy is "Specimen"		Recognised terminology name - laboratory specimen	NA	NA				
Laboratory result	Specimen Type Identifier - Recognised Terminology		Unique identifier of Specimen Type in the recognised terminology	CE	Coded Element	[Specimen Type Identifier - Recognised Terminology] should be included in the selected recognised terminology of the "Recognised Terminology Name - Laboratory Specimen" code table.			NA	NA				
Laboratory result	Specimen Type Description - Recognised Terminology		Description of Specimen Type in the recognised terminology	CE	Coded Element	[Specimen Type Description - Recognised Terminology] should be matched with the corresponding description of the selected [Specimen Type Identifier - Recognised Terminology]			NA	NA				

Appendix – Anatomical pathology result dataset (page 5 of 6)

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)
Laboratory result	Specimen Type local code		Local code for the Specimen Type issued by the performing laboratory	ST	String				NA	O	Under Development		S423	Under Development
Laboratory result	Specimen Type local description		Local description for the Specimen Type issued by the performing laboratory	ST	String				NA	O			Wound Swab	
Laboratory result	Specimen Collection Datetime		The date and time when the specimen was collected.	TS	Time Stamp				NA	O			01/04/2012 2:00:00 PM	
Laboratory result	Specimen Arrival Datetime		The specimen arrival date/time is the time that the specimen is received at the laboratory. The actual time that is recorded is based on how specimen receipt is managed and may correspond to the time the sample is logged in. This is different from Specimen-Collect	TS	Time Stamp				NA	O			01/04/2012 2:00:00 PM	
Laboratory result	Anatomical Pathology Test Name		Local description of test or procedure for the anatomical pathology request made by clinicians. e.g. Gynae Cytology; Surgical Biopsy; Fine Needle Aspiration ; Frozen Section	ST	String				NA	M			Biopsy	
Laboratory result	Anatomical Pathology Result - Clinical Information		Narrative comment or description of clinical information in result level	TX	Text				NA	O			Anaemia	
Laboratory result	Anatomical Pathology Result - Specimen		Narrative comment or description of a specimen in result level	TX	Text				NA	O			Vagina scraping	
Laboratory result	Anatomical Pathology Result - Gross Examination		Narrative comment or description of gross examination by the performing laboratory.	TX	Text				NA	O			3 cm in diameter, red color	
Laboratory result	Anatomical Pathology Result - Microscopic Examination		Narrative comment or description of microscopic examination and findings.	TX	Text				NA	O			Numerous polymorphs present.	
Laboratory result	Anatomical Pathology Diagnosis Text Result		Narrative comment or text description of pathological diagnosis by the performing laboratory.	TX	Text				NA	M			Adenocarcinoma of right lung	
Laboratory result	Topography Local Code		Local code for the diagnosis result on anatomical site issued by the performing laboratory. e.g. T-code in SNOMED 3	ST	String		R		NA	O			T-28000 01, 001	
Laboratory result	Topography Local Description		Local description for the diagnosis result on anatomical site issued by the performing laboratory	ST	String		R		NA	O			Adenocarcinoma, NOS	

Appendix – Anatomical pathology result dataset (page 6 of 6)

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)
Laboratory result	Finding Local Code		Local code for the diagnosis result on pathological finding issued by the performing laboratory e.g. SNOMED M/D/F codes, M-40000 01 001	ST	String		R		NA	O	Under Development		M-40000, 01, 001	Under Development
Laboratory result	Finding Local Descripiton		Local description for the diagnosis result on pathological finding issued by the performing laboratory	ST	String		R		NA	O			INFLAMMATION	
Laboratory result	Other Anatomical Pathology Result Title		The title or caption of the section in anatomical pathology report apart from -Clinical information -Specimen -Gross Examination -Microscopic Examination -Diagnosis Example: Pathology Comment	ST	String		R		NA	O			Pathology Comment	
Laboratory result	Other Anatomical Pathology Text Result		Narrative comment or description of result following the [Other Anatomical Pathology Title] field. Including all text results other than Clinical information, Specimen, Gross examination, Microscopic examination and Diagnosis. It may include immunohistochemistry test, molecular diagnostic test results, or any	TX	Text		R		NA	O			The specimen is unsatisfactory.	