

eHR Record Content - Laboratory Result

28 June 2013

By Ping Chong Ho

Health Informatics Analyst I, eHRISO

Outline

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

Mindmap & Dataset

Laboratory Record Content

Laboratory Test Request

Laboratory Test Order Number

Laboratory Test Request Institution

Laboratory Test Requesting Doctor

Laboratory Test Request Clinical Information

Laboratory Test Request Panel

Laboratory Test Request Healthcare Institution Identifier

Laboratory Test Request Healthcare Institution Long Name

Laboratory Test Request Healthcare Institution Local Name

Panel Local Code

Panel Local Description

Laboratory Test Request Performing Laboratory Name

Laboratory Test Request Number

Laboratory Category

Laboratory Category Code

Laboratory Category Description

Laboratory Category Local Description

Laboratory Report Status Code

Laboratory Report Status

Laboratory Report Status Description

Laboratory Report Status Local Description

Laboratory Report Reference Datetime

Laboratory Report Authorized Person

Laboratory Report Authorized Healthcare Staff English Name

Laboratory Report Authorized Healthcare Staff Chinese Name

Laboratory Result General Information

General Laboratory Test Result

Laboratory Test Enumerated Result

Laboratory Test Reportable Result

General Laboratory Test Detection Limit Indicator

Detection Limit Indicator Code

Detection Limit Indicator Description

Detection Limit Indicator Local Description

General Laboratory Test Abnormal Result Indicator

Abnormal Result Indicator Code

Abnormal Result Indicator Description

Abnormal Result Indicator Local Description

Laboratory Test Result Unit

Laboratory Test Reference Range

Laboratory Test Text Result

Laboratory Test Result Note

Reported by
Authorized by

***** End of report *****

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

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Report on: 13/03/2007 18:12
Report Destination: KKH/SUR/PL

Printed on 13/03/2007 18:12
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Name
gy
ology

Laboratory Test Name - Recognised Terminology Name

Laboratory Test Name Identifier - Recognised Terminology

Laboratory Test name description - Recognised Terminology

Laboratory Test Name Local Code

Laboratory Test Name Local Description



Laboratory Record Content for eHR

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

C

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

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

生化病理報告 Chemical Pathology

Lab No.: 07C0377791
Clinical Details: GIB

Collect Date : 13/03/07
Collect Time : 15:45
Arrive Date : 13/03/07
Arrive Time : 15:45
Request No. : C0377791
Urgency : R

Sodium
Potassium
Chloride
Urea
OCreatinine
Total Protein
Albumin
Globulin
Bilirubin, total
ALP
ALT
Calcium
Phosphate

Authorized by: LIS Team

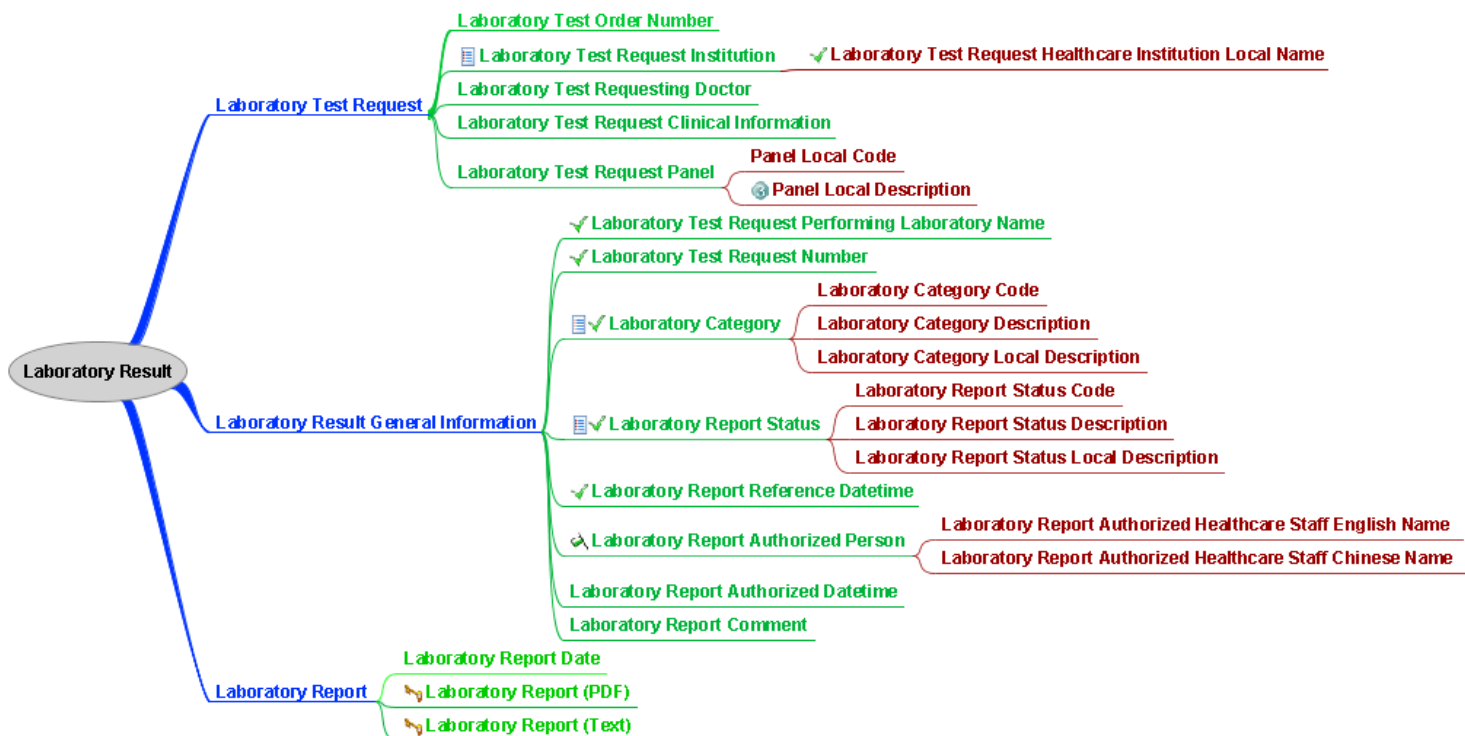
*This is a file

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

Case No.: SUR 07012345 (MRN: 223345)
Name: CHAN, TAI MAN
陳大文
HKID: A123456 (3)
Sex: M Age: 19Y DOB: 01/07/1987

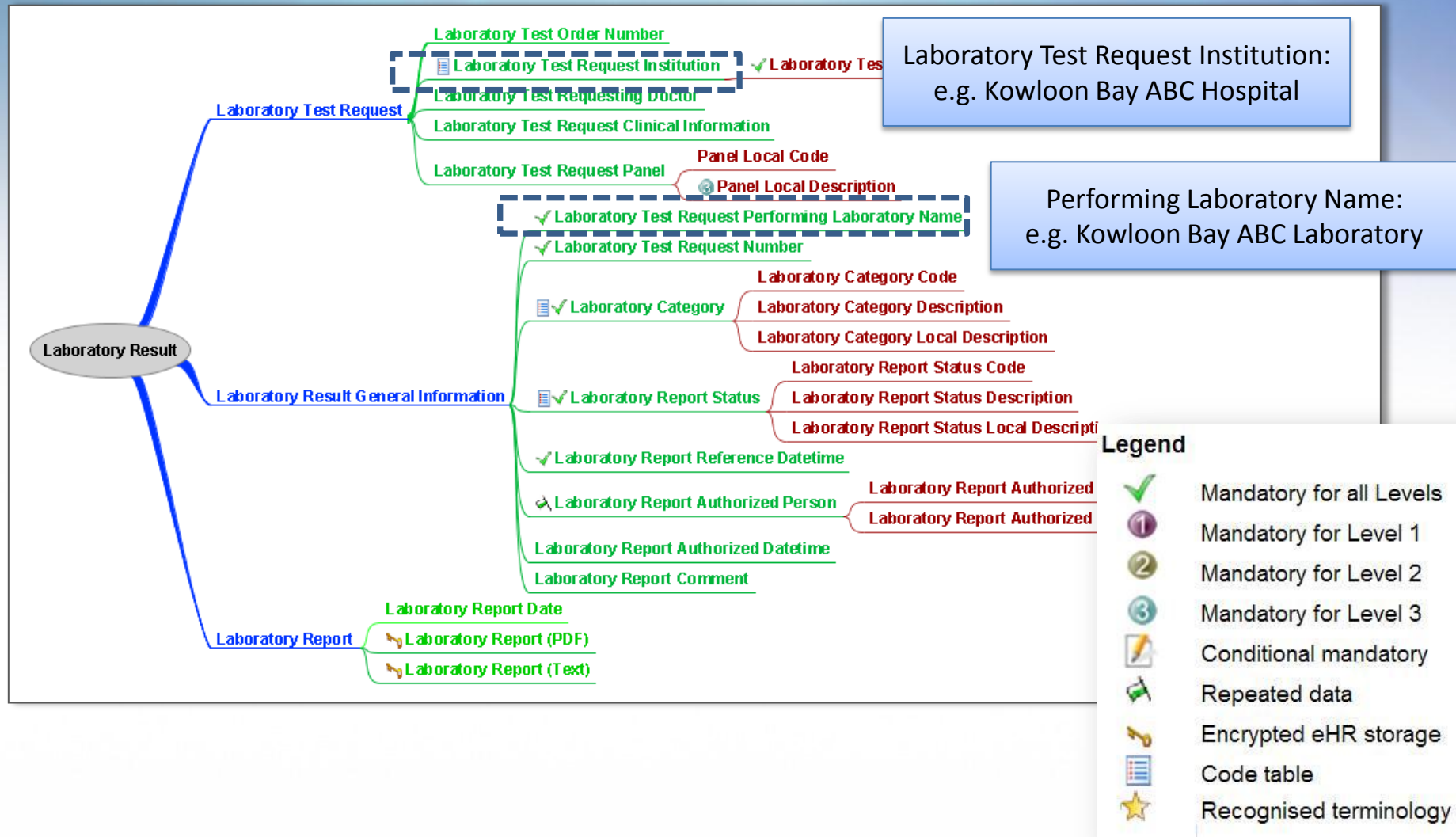


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Report Destination: KMR/SUR/PL

Printed on 12/03/2007 17:10
Cum Page No.: 1 Page No.: 1/1

GENERAL RESULT

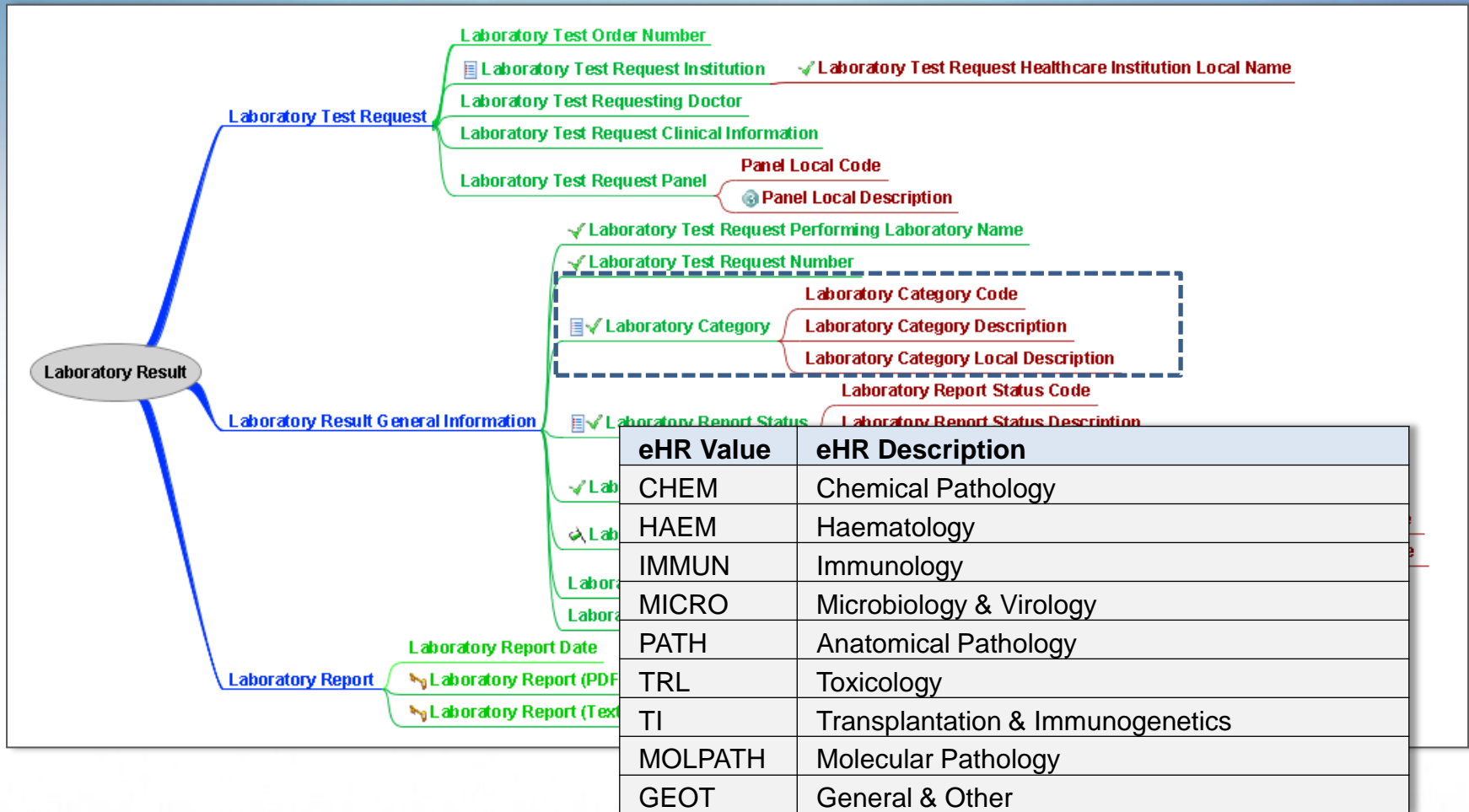
Level 1 Compliance for General Result



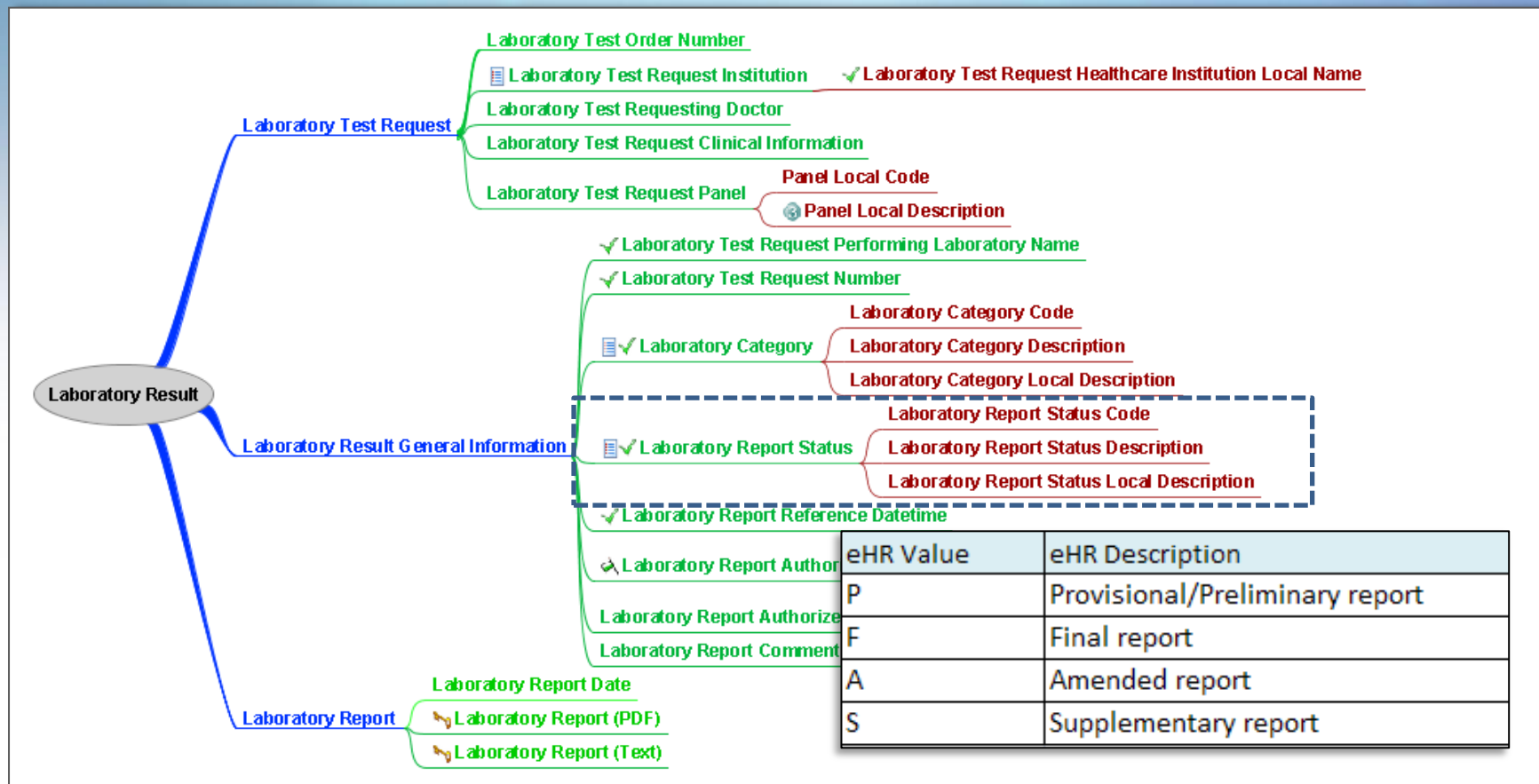
Laboratory Test Request Institution:
e.g. Kowloon Bay ABC Hospital

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

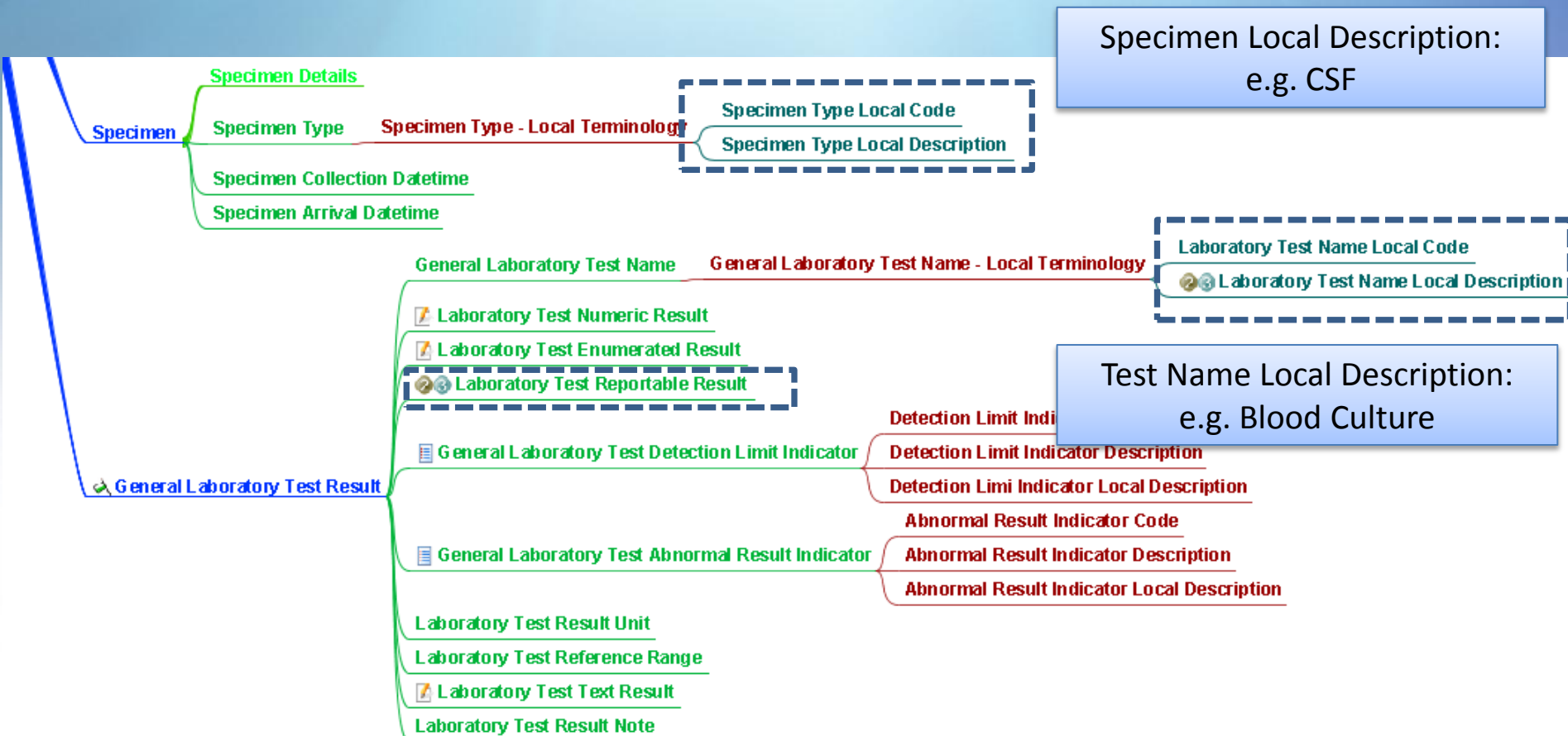
Level 1 Compliance (..2)



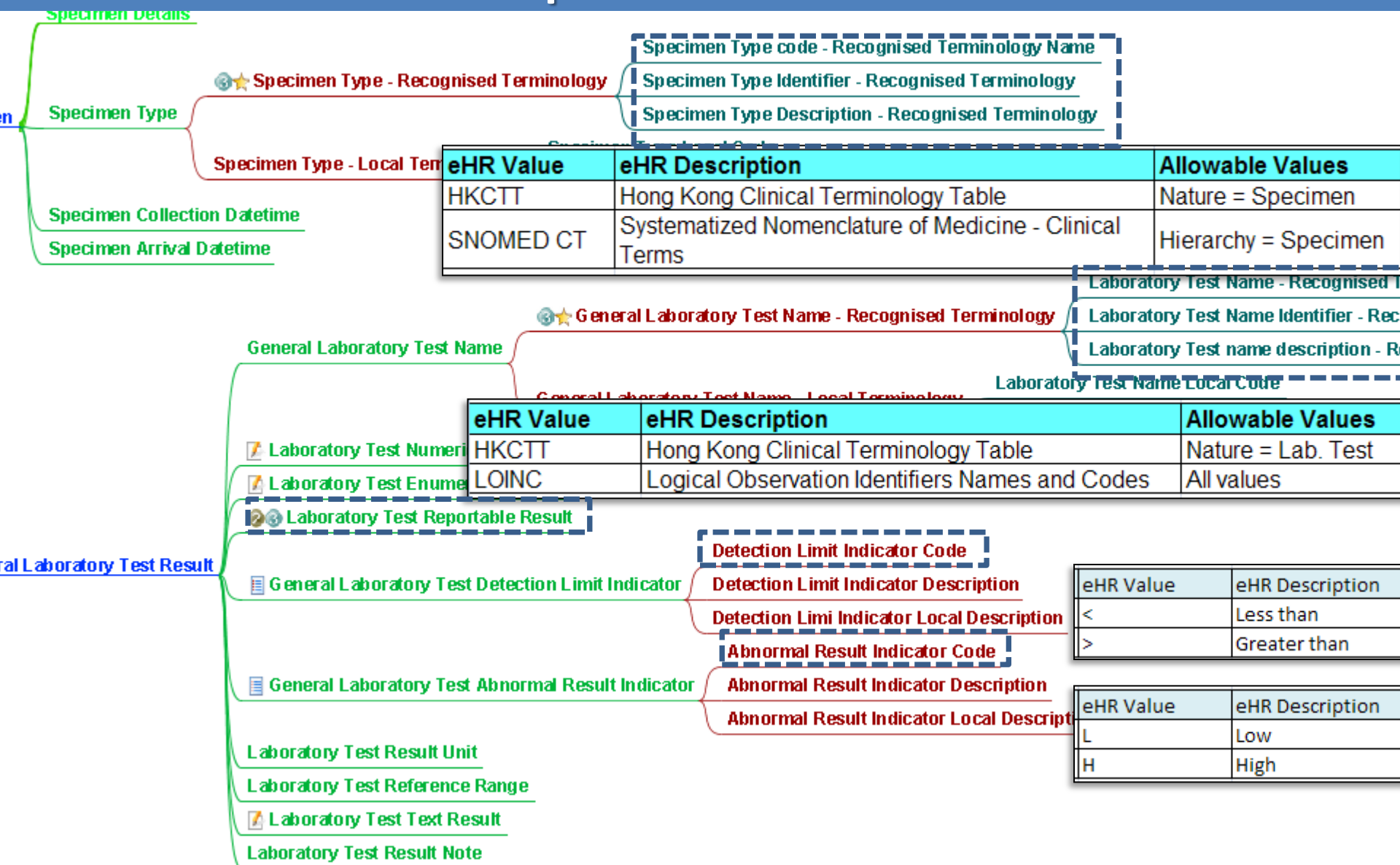
Level 1 Compliance (..3)




Level 2 compliance for General Result










Level 3 Compliance for General Result



General Laboratory Result


All Local Non-Local
Legend

Encounter

- ▼ **Problem & Procedure**
 - Problem / Diagnosis
 - Procedure
 - Investigation Report
- ▼ **Medication**
 - Prescribing History
 - Dispensing History
- ▼ **Laboratory Record**
 - Chemical Pathology**
 - Haematology
 - Immunology
 - Microbiology & Virology
 - Anatomical Pathology
 - Toxicology
 - Transplantation & Immunogenetics
 - Molecular Pathology
 - General & Other
- ▼ **Radiology Record**
 - General Radiology
 - Computed Tomography
 - Angiographic / Vascular IR
 - Non-vascular IR
 - Magnetic Resonance Imaging
- ▼ **Immunisation Record**

Laboratory Record

Date View
Document View
Chemical Pathology
Period: All
View: Active

Date	Profile Description	Institution
24-Dec-2012	AD, RFT	VUC4_A
06-May-2011	RFT	VUC4_A
13-Jun-2010	RFT	VUC4_A
13-Mar-2009	R12P,CBC,FOLP,TSHP	V/H_AHN

Laboratory Cumulative

Last 1 year

Institution	VUC4_A	VHC4	VHC4	VHC4
Date	24-Dec-2012	15-Dec-2012	21-Aug-2012	20-Aug-2012
PDF Report				
Haemoglobin, Blood	20			
Anisocytosis	123			
Hemoglobin Pattern	120	215	100 ↓	
HbA		90	200 ↑	
Hemoglobin F		700 ↑		100
Hemoglobin F, Betke		200		
Hemoglobin A2		500 ↑		
Hb Barts		215		
Hb Variant		90		
Hb H Inclusions		700 ↑		
Haemoglobin Pattern Results		200		
Hemoglobin Pattern Test		500 ↑		
Haptoglobin		90		

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醫院管理局
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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

Date Collected: 13/03/07

Date Arrived: 13/03/07

Specimen: Endometrium

Clinical History
Irregular menses

Gross Examination
2 ml brownish soft tissue

Microscopic Examination
Section show secretory endometrium with dilatation in an adenomatous glandular pattern, consistent with malignancy.

Diagnosis
Endometrium, sampling -

Final Report

URGENT

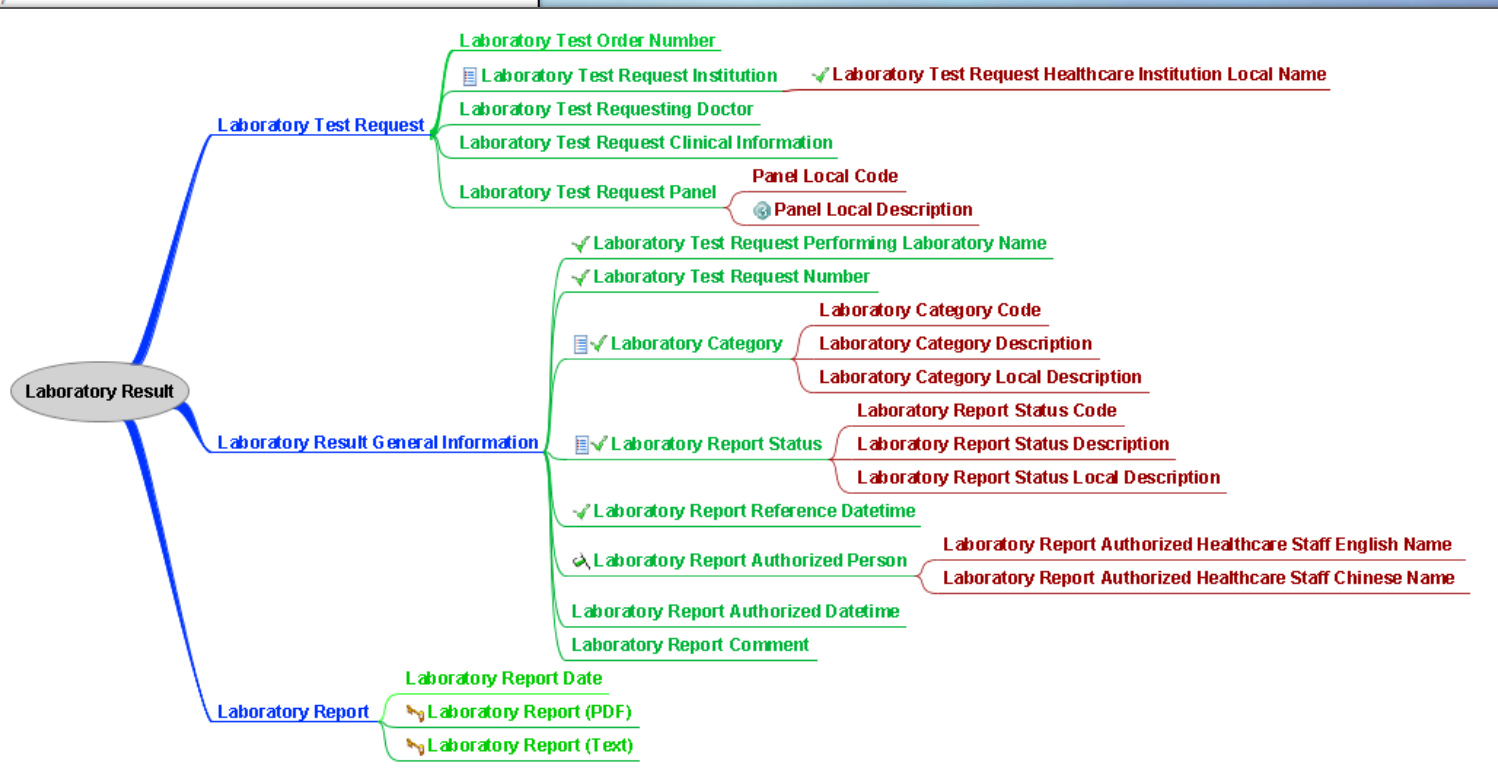
Reported by : LIS Testing

Authorized by: LIS Testing

*This is a final report

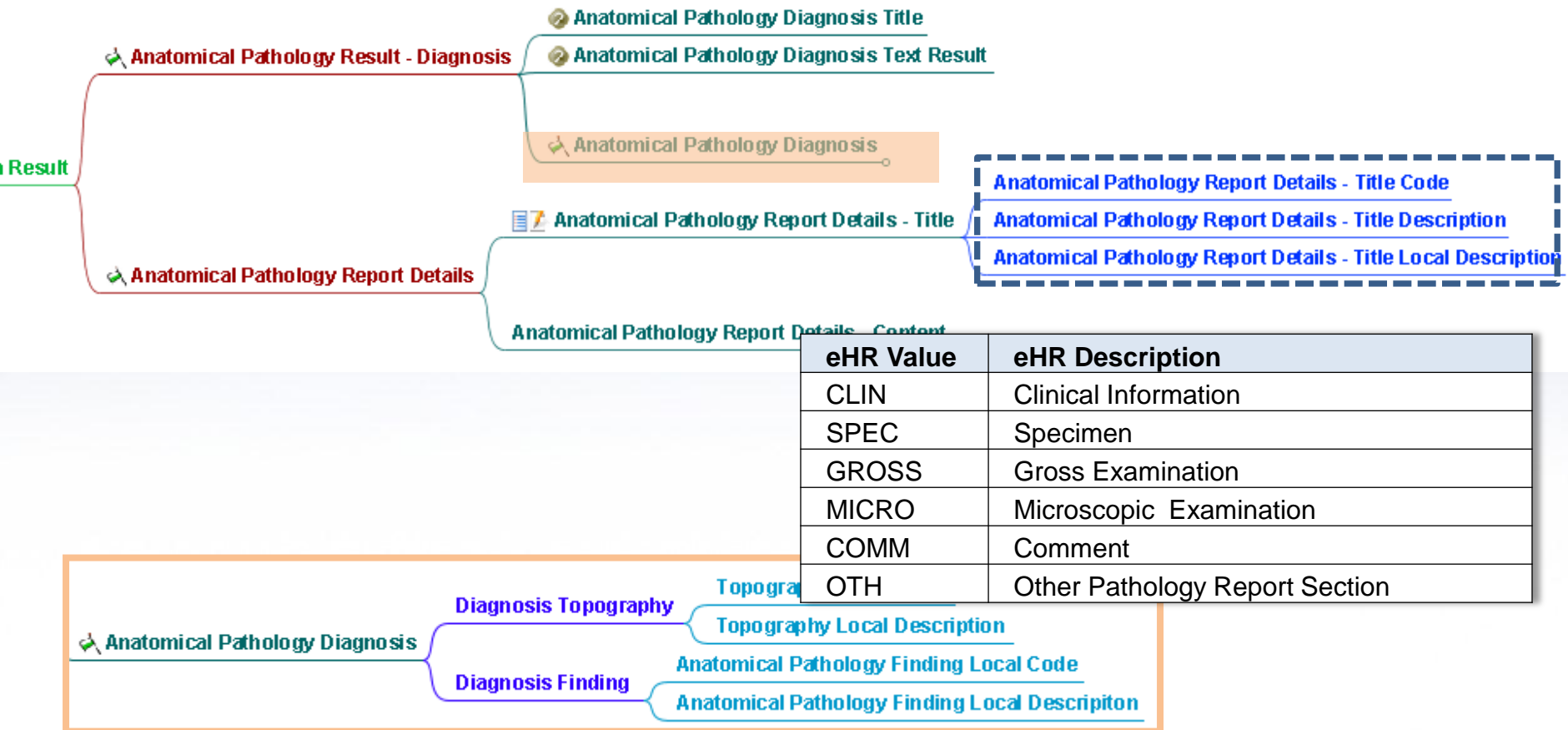
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ANATOMICAL PATHOLOGY

Anatomical Pathology Result – Level 2 Compliance



Anatomical Pathology Result – Level 2 Compliance

Anatomical pathology report

Specimen : ANTRAL GASTRIC EX ; DISTAL ESOPHAGUS EX

Clinical History :

OGD : gastric erosion antrum. LA grade C esophagitis.

Macro. Exam. :

-a. & -b. All embedded in 1b.

Micro. Exam. :

-a. Section shows two pieces of gas inflammatory cells of mild activity evidence of malignancy.

-b. Section shows two pieces of muc propria contains moderate mixed inf malignancy or viral inclusion.

Diagnosis :

STOMACH, antrum, biopsy - active CH ESOPHAGUS, biopsy - ESOPHAGITIS.

Mapping to eHR data model

Local description	eHR Value
Clinical History :	CLIN
Macro. Exam :	GROSS
Micro. Exam :	MICRO

Local description	eHR entity
Diagnosis :	

Refer to eHR
Pathology Report

Reorder the report structure

Section order
Specimen
Clinical information
Diagnosis
Comment

health

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

Date View Document View Laboratory: All Period: All View: Active

Date	Profile Description	Institution
12-Apr-2007	Anatomical Pathology Report (Text)	VHC4
12-Apr-2007	Soft tissue / Frozen Section (Final report)	VUC4_A
	Provisional report	
04-Mar-2007	Transplantation & Immunogenetics	VUC4_B

Anatomical Pathology

Report:

OGD : gastric erosion antrum. LA grade C esophagitis.

Diagnosis:

STOMACH, antrum, biopsy - active CHRONIC GASTRITIS.

ESOPHAGUS, biopsy - ESOPHAGUS

Macro. Exam:

-a. & -b. All embedded in1b.

Micro. Exam:

-a. Section shows two pieces mucosa. with moderate infiltrate of mixed inflammatory cells of mild activity. Helicobacter bacilli are absent. There is no evidence of malignancy.

-b. Section shows two pieces of mucosa from squamo-columnar junction. The lamina propria contains moderate mixed inflammatory infiltrate. There is no evidence of malignancy or viral inclusion.

Anatomical Pathology Result – Level 2 Compliance

Anatomical pathology report

Macro. Exam. :

(A)

2 lymph nodes were received at 10:06am and measured 6mm, 5mm in size. All embedded in 3 blocks.

(B)

2 lymph node was received and measured 5mm, 12mm in size. All embedded in 1 block.

Micro. Exam. :

(A) Sentinel lymph nodes

H&E sections-----: Tumour cells in paraffin

IHC (cytokeratin)-----: Performed

Number of involved sentinel nodes ==: 1/2

Maximal size

Perinodal spread

(B) Axillary lymph node

H&E sections-----

IHC (cytokeratin)

Number of involved

Frozen Diagnosis :

-a

Left sentinel LYMPH NO
- NO EVIDENCE OF MALIGNANCY

-b

Left axillary LYMPH NO
- NO EVIDENCE OF MALIGNANCY

(Reported to Dr Poon a

Diagnosis :

-a

Left sentinel LYMPH NO
- MICROMETASTASIS (1/2)

-b

Left axillary LYMPH NO
- NO EVIDENCE OF MALIGNANCY (0/2)

Computerized Summary :

Micromet. (1/4)

Mapping to eHR data model

Local description	eHR Value
Macro. Exam :	GROSS
Micro. Exam :	MICRO

Local description	eHR entity
Frozen Diagnosis:	Anatomical Pathology
Diagnosis :	Anatomical Pathology

Refer to eHR codex 'Anatomical Pathology Report Structure'

Reorder the report structure

Section order
Specimen
Clinical information
Diagnosis
Comment

eHR viewer

health
BIOINFORMATICS
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

Record

Date View	Document View	Laboratory: All	Period: All	View: Active
Date	Profile Description	Institution		
12-Apr-2007	Anatomical Pathology Report (Text)	VHC4		
12-Apr-2007	Soft tissue / Frozen Section (Final report)	VUC4_A		
12-Apr-2007	Provisional report	VUC4_A		
12-Apr-2007	Transcriptase & Immunohistochemistry	VUC4_A		

Anatomical Pathology

Report:

Micro. Exam. :

(A) Sentinel lymph nodes

H&E sections-----: Tumor cells in paraffin

IHC (cytokeratin)-----: Performed

Number of involved sentinel nodes ==: 1/2

Maximal size of metastasis-----: 0.3mm

Perinodal spread -----: Absent.

(B) Axillary lymph node sampling

H&E sections-----: Negative for malignancy

IHC (cytokeratin)-----: Performed

Number of involved sampled nodes ==: 0/2

Computerized Summary :

Micromet. (1/4)

M

醫院管理局
Hospital Authority
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病理化驗部
Department of Pathology
微生物化驗報告 Microbiology Report

Case No.: SUR 07012345 (MSN: 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

Gram stain :-
WBC: ++ (Moderate)
Epithelial cell: ++ (Moderate)

General Laboratory Test Result

Microbiology culture test Result

Microbiology Culture Test Name

Microbiology Culture Test - Recognised Terminology

Microbiology Culture Test - Local Terminology

Microbiology Culture Finding Text Result

Microbiology Culture Finding

Organism

Organism - Recognised Terminology

Organism - Local Terminology

Organism Growth Description Text Result

Organism - Susceptibility Test and Related Property

Authorized By: LIS
Medical Microbiologist: Dr. LUK WEI KWANG

***** End of report *****

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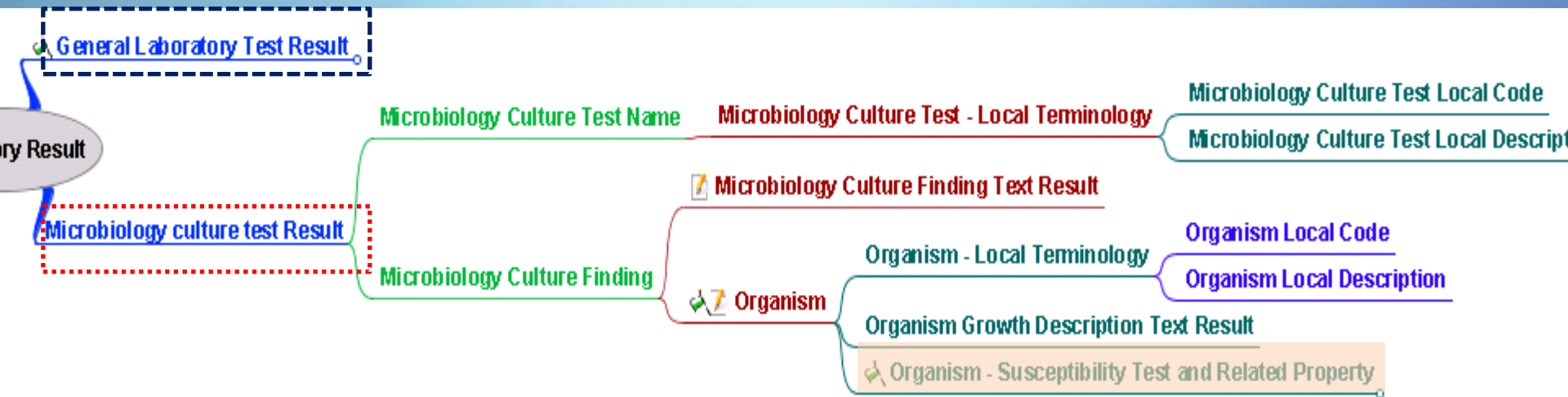
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Printed on 13/03/2007 17:37

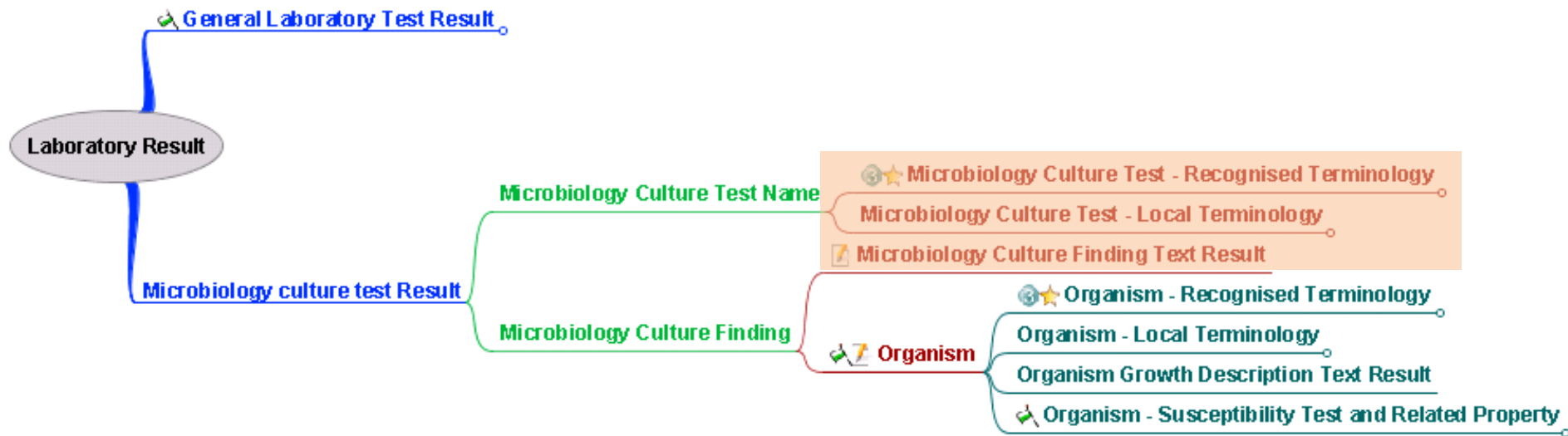
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MICROBIOLOGY (C&ST)

Microbiology C&ST – Level 2 Compliance

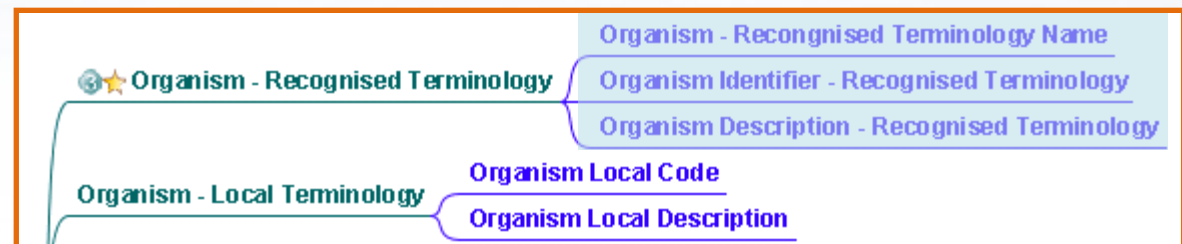
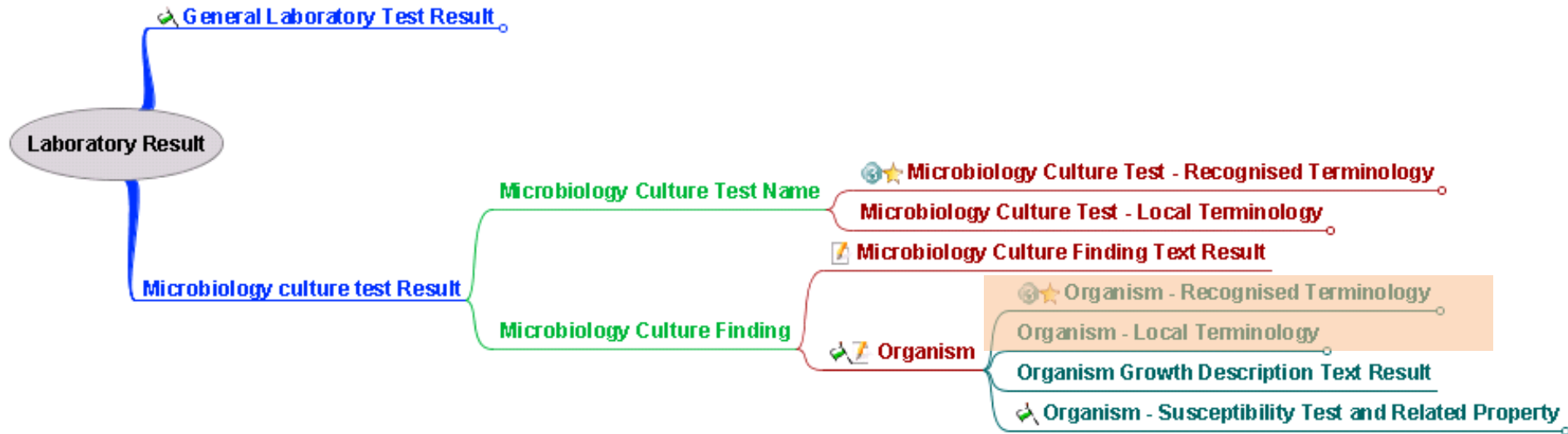


Microbiology C&ST – Level 3 Compliance



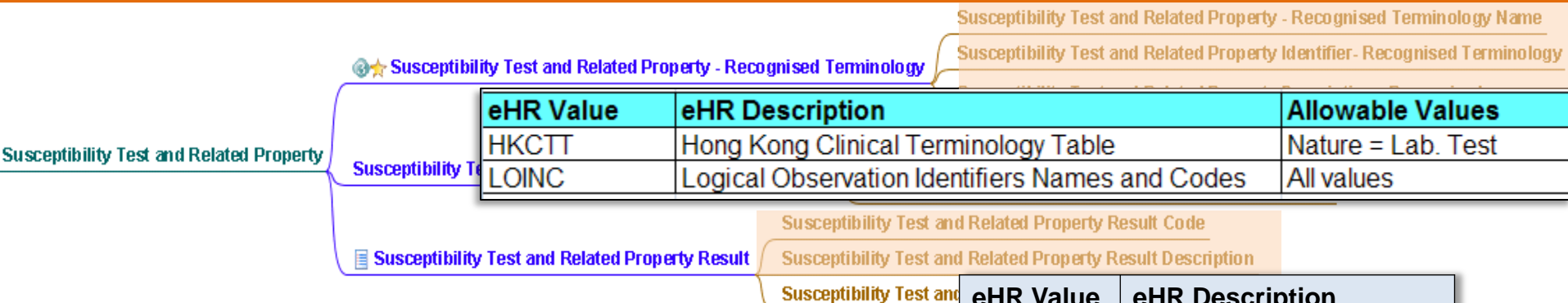
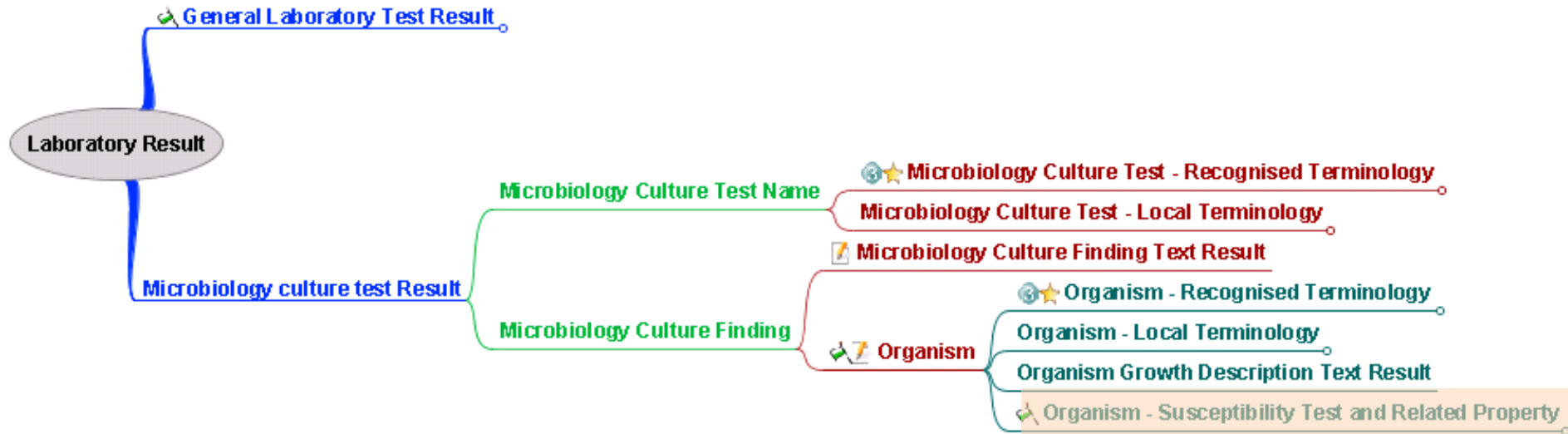
eHR Value	eHR Description	Allowable Values
HKCTT	Hong Kong Clinical Terminology Table	Nature = Lab. Test
LOINC	Logical Observation Identifiers Names and Codes	All values

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
S	Sensitive
I	Intermediate
R	Resistant
P	Positive
N	Negative
U	Indeterminate



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


All Local Non-Local

Legend



Encounter

- Problem & Procedure
 - Problem / Diagnosis
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- Medication
 - Prescribing History
 - Dispensing History
- Laboratory Record**
 - Chemical Pathology
 - Haematology
 - Immunology
 - Microbiology & Virology
 - Anatomical Pathology
 - Toxicology
 - Transplantation & Immunogenetics
 - Molecular Pathology
 - General & Other
- Radiology Record
 - General Radiology
 - Computed Tomography
 - Angiographic / Vascular IR
 - Non-vascular IR
 - Magnetic Resonance Imaging
- Immunisation Record

Laboratory Record

Date View
Document View
Microbiology & Virology
Period: All
View: Active

Date	Profile Description	Institution
06-Apr-2011	Tissue / I10, I31, MCOM	VHC4
23-Jun-2009	Tissue / I10, I31, MCOM	VUC4_A
23-Jun-2007	MID-STREAM URINE	VUC4_A

Laboratory Microbiology Details

Attending Institution: Virtual Unit A
Requesting Institution: Virtual Unit A
Performing Institution: Virtual Unit A
Reference Date: 23-Jun-2007
Comment: Comment

Test Name	Content	Comment
Culture, Urine Organism : Klebsiella species		
1. Ampicillin	Resistant	
2. Amikacin	Resistant	
3. Gentamicin	Resistant	
4. Imipenem	Sensitive	

Ok

Thank you

