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# **Pathology Result Report**

## **Structured Document Template**

Version 1.0 - 30/06/2009

Draft for Comment

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# Document Information

## Change History

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0.09	2009-03-10	Eleanor Royle	Updates to bring document into line with other SDTs
1.0	2009-06-30	Matt Cordell	Update to incorporate stakeholder feedback and continue alignment with other SDTs

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# Table of contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
1.1	Purpose and Scope.....	1
1.2	Intended Audience .....	2
1.3	Definition of Pathology Report.....	2
1.4	Related Documents .....	3
1.5	Document Map .....	3
1.6	Terminology Used in this Document.....	5
1.6.1	Subject of Care .....	5
1.6.2	Attestation .....	5
<b>2</b>	<b>Use Case Documentation .....</b>	<b>7</b>
2.1	Structured Document Template Role.....	7
2.2	Activity Diagram .....	8
2.3	Definitions .....	8
2.4	Use Case Actors.....	9
2.4.1	Clinical Information System (CIS).....	9
2.4.2	Laboratory Information System (LIS) .....	9
2.4.3	Laboratory Worker .....	10
2.4.4	Clinician.....	10
2.4.5	Pathologist .....	10
2.4.6	Requester .....	10
2.4.7	Automated Analyser .....	11
2.5	Use Cases.....	12
2.5.1	Use Case – Create Result .....	12
2.5.2	Use Case – Amend Result .....	13
2.5.3	Use Case Diagram - Create/Amend Result .....	13
2.5.4	Use Case – Receive Result .....	14
2.5.5	Use Case Diagram - Receive Result .....	14
<b>3</b>	<b>UML Diagram .....</b>	<b>15</b>
3.1	Pathology Episode.....	15
3.2	Participant .....	16
<b>4</b>	<b>Header.....</b>	<b>17</b>
4.1	Subject of Care.....	18
4.2	Facility Detail .....	20
4.3	Clinical Process Identification .....	21
4.4	Document Control .....	22
4.5	Document Author (Reporting Pathologist).....	22
4.6	Document Authoriser/Approver .....	23
4.7	Document Recipient (Pathology Report To) .....	23
<b>5</b>	<b>Pathology Result Report Detail .....</b>	<b>25</b>
5.1	PATHOLOGY EPISODE.....	27
5.2	Report.....	29
5.3	Episode Note.....	30
5.4	DateTime Requested .....	31
5.5	PATHOLOGY TEST REQUESTER .....	32
5.6	PATHOLOGY REPORT COPY TO .....	34
5.7	RESULT GROUPING .....	36
5.8	REQUEST DETAIL.....	37
5.9	Priority .....	38
5.10	Request Status .....	39
5.11	Clinical Reason for Request .....	40

5.12	Related Problem or Diagnosis .....	42
5.13	Requester Order Identifier .....	44
5.14	Laboratory Request Identifier .....	45
5.15	Request Test Name .....	46
5.16	SPECIMEN DETAIL .....	47
5.17	Specimen Type.....	49
5.18	Specimen Qualifier.....	51
5.19	Specimen Anatomical Site.....	52
5.20	Specimen Identifier.....	53
5.21	DateTime Specimen Collected.....	54
5.22	Specimen Collection Setting.....	55
5.23	DateTime Specimen Received.....	56
5.24	Specimen Characteristic .....	57
5.25	Specimen Quality .....	58
5.26	RESULT DETAIL.....	59
5.27	Laboratory Request Identifier .....	61
5.28	Laboratory Result Identifier.....	62
5.29	Result Test Name .....	63
5.30	STRUCTURED RESULT ENTRY .....	64
5.31	Result Observable Name.....	65
5.32	Result Observable Value .....	66
5.33	RESULT OBSERVABLE REFERENCE RANGE.....	67
5.34	Reference Range .....	68
5.35	Clinical Guideline Note.....	69
5.36	Testing Method .....	70
5.37	Result Note.....	71
5.38	Unexpected Result Indicator.....	72
5.39	Out Of Range Indicator.....	73
5.40	Result Observable Status.....	74
5.41	Interpretive Note.....	75
5.42	PERFORMING PATHOLOGIST .....	76
5.43	Result Status .....	78
5.44	DateTime Result Issued.....	79
<b>6</b>	<b>Sample Reports .....</b>	<b>81</b>
6.1	Sample Report Header .....	81
6.2	Sample 1.....	82
6.3	Sample 2.....	84
6.4	Sample 3.....	85
6.5	Sample 4.....	86
<b>7</b>	<b>Reference List.....</b>	<b>87</b>
<b>8</b>	<b>Index.....</b>	<b>89</b>

# 1 Introduction

## 1.1 Purpose and Scope

The role of Clinical Information Structured Reporting ('CISR') within NEHTA is to specify the Logical Record Architecture to be used for clinical communication, and to specify interchange formats that can be used to communicate this logical model. For each package, CISR will be producing the following set of documents:

1. **Structured Document Templates**, which organise the data elements from NEHTA Data Groups into a logical model for clinical communication for a given purpose. Refer to the document *NEHTA Data Specification and Structured Document Template Guide for Use [DS-GUIDE]* for further details.
2. **Message Profiles**, which bind a single Structured Document Template to a particular messaging format, such as HL7 v2.5 or HL7 CDA, and provide instructions on how the messaging format should be implemented.

These documents are one component of the solution proposed for the purposes as specified by a NEHTA package. Other components, such as terminologies and web services, are covered in other documents within a package release.

The clinical information specifications for this release of the pathology result reporting package consist of:

- *Pathology Result Report -Structured Document Template [PRR-SDT]*
- *Pathology Results Reporting Interchange Format [IF-PRR]*

This document is the *Pathology Result Report- Structured Document Template*. It describes the logical information model proposed for use in communicating pathology results from pathology laboratories. The purpose and scope of release 1 of the pathology result reporting package is described in the *Pathology Result Reporting Package - Purpose and Scope v3.0 [PRR-PS]*. This Structured Document Template can be used as a template for reporting between pathology laboratories and all recipients, including hospitals.

However, the following processes are excluded from the scope of this release:

- Pathology reporting done for non-human subjects (e.g. routine testing of water from cooling towers, routine testing of equipment to ensure that contamination has not occurred).
- Synoptic result reporting – this Structured Document Template is a generic structure that can be used for all pathology results, but does not contain the detail that may be desired for synoptic reporting. This may form the subject of subsequent releases of this package.
- Processes involved before and after the transmission of the Pathology Result Report. This includes internal information requirements (of the laboratory) during the actual testing process and processes associated with the clinicians managing receipt of electronic Pathology Result Reports.

The Interchange Format document [\[IF-PRR\]](#) describes how HL7 v2.4 should be used to encode and send pathology result reports between a sender and a recipient forms part of the initial release. Later releases of this package may include alternate interchange formats, such as CDA.

## 1.2 Intended Audience

All documentation included in the Pathology Result Report Package is intended to be read and understood by:

1. Software development teams (Vendors – both Laboratory Information Systems and Clinical Information Systems, Jurisdictions)
  - a. To plan, architect or implement:
    - clinical applications, infrastructure components or messaging interfaces
    - facilitating semantic interoperability
  - b. To support NEHTA-defined terminology in:
    - clinical interfaces and messaging interfaces
    - generating value domains for data elements
    - creating or receiving electronic information exchanges containing clinical content
    - writing queries over clinical Electronic Health Record (EHR) data
    - implementing data constraint checks
    - designing term mappings
2. IT-aware clinicians and pathologists to evaluate the clinical suitability of NEHTA-endorsed standards.
3. Researchers to explore certain aspects of NEHTA-endorsed standards.

The documents are reasonably technical in nature and expect the audience to be familiar with the language of health data specifications and have some familiarity with health information standards and specifications such as [HL7 v2.4], and [AS4700.2 – 2007]<sup>1</sup>.

## 1.3 Definition of Pathology Report

A Pathology Report is defined in [AS4700.2 – 2007]<sup>2</sup> as:

*... a set of one or more results and any associated interpretation usually generated in response to a request for Pathology. A report may include results previously reported and in some instances results from another request.*

The essence of a pathology report is the transferring of the results of a pathology investigation, in whole or in part, from one healthcare provider or organisation to another healthcare provider or organisation.

A pathology report can take several forms:

- A report from a laboratory to the requesting clinician, whether they are in the community or a hospital setting;
- A report from a reference laboratory to a requesting laboratory (the report may also be sent to the original requesting clinician);
- A report from a laboratory to a shared electronic record; or
- A report from a laboratory to a notification system or registry for notifiable or infectious diseases.

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<sup>1</sup> All standards and specifications are listed in the *Reference* section of this document.

<sup>2</sup> [AS4700.2 – 2007], Section 4.11, page 9.

This SDT defines the logical structure and allowable content of the information to be exchanged to communicate the results of one or more pathology episodes for a single Subject of Care. A 'pathology episode' is defined as one or more requested pathology tests, where the request meets the following conditions:

- It was directed to a single primary performing laboratory (this does not exclude the ability for this lab to forward a component of the request to a secondary laboratory);
- It was from a uniquely identified requester (who must be a healthcare provider – individual);
- It is for a uniquely identified Subject of Care; and
- The request was made at a single point in time.

This last condition does not exclude the ability to modify the request at a later time, however later requests to the same laboratory from the same requestor for the same Subject of Care which are not specifically sent though as an amendment to the initial request will result in a new Pathology Result Report being initiated.

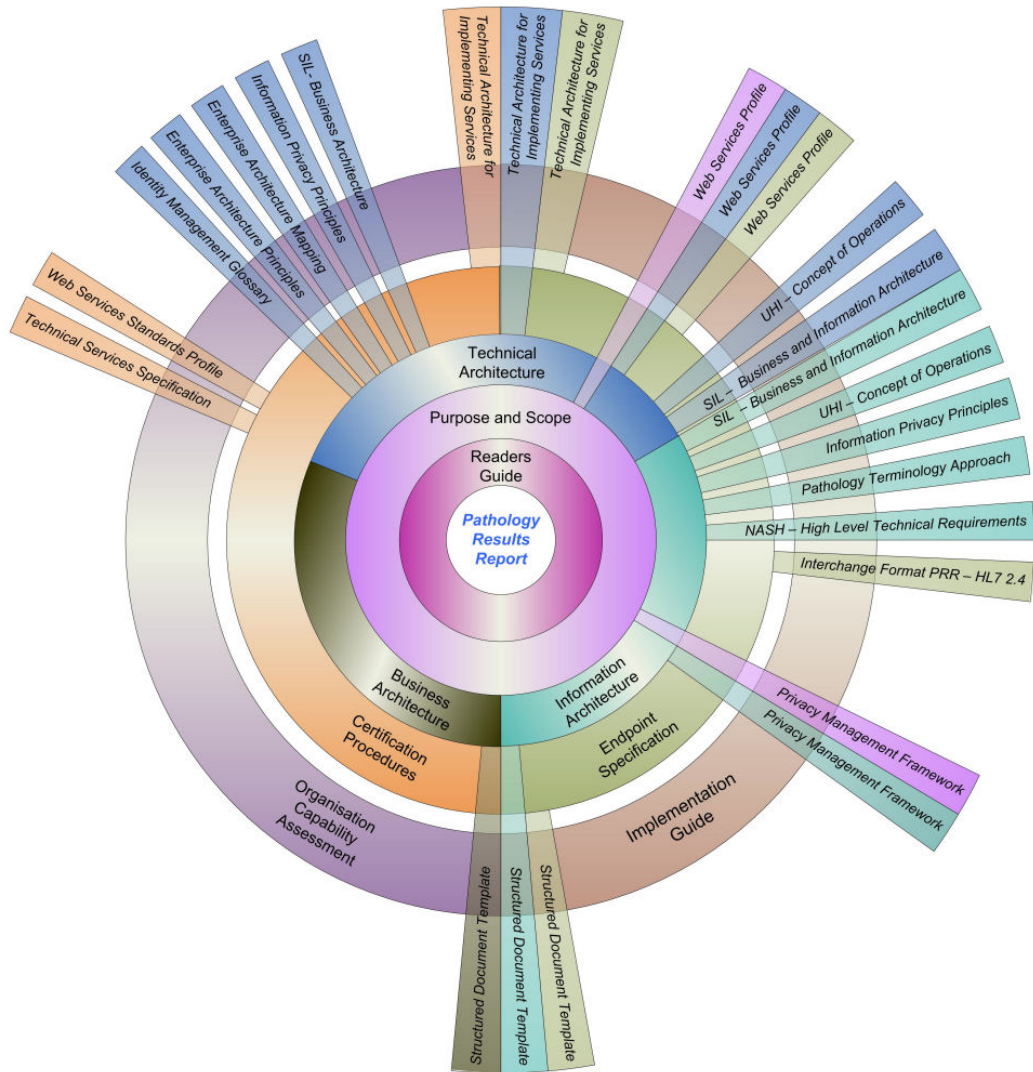
## 1.4 Related Documents

Companion documents to this SDT are listed below.

1. *Data Specifications – Guide for Use* [\[DS-GUIDE\]](#). This guide describes the generic data structures, data types, keywords and icons used within this Structured Document Template.
2. *Document Header Data Specification* [\[DS-DH\]](#). This specification contains the full specification of the standardised header used across all NEHTA Structured Document Templates
3. *Participation Data Specification* [\[DS-PART\]](#). This specification contains the full specification which forms the basis of all participants contained in NEHTA Structured Document Templates.

## 1.5 Document Map

This document is one of a series of documents used for clinical communications within the pathology domain as shown in the document map ([Figure 1](#)) on the following page.



**Figure 1: Pathology Domain Document Roadmap**

This diagram is best thought of as a series of ripples, radiating from a central core. The highest level overview (the *Readers' Guide*) is the central ring; the most detailed specifications for implementation are on the outer ring.

Business sponsors and implementers need to read the documents in the inner level to gain an overview of the Pathology Result Reporting solution. Technical developers need to read the detailed documents in the outer level so that they know how to deliver the solution.

Supporting documents are depicted as bars that originate in one or more rings. So at the bottom of the diagram, you can see the *Structured Document Template* spanning two levels. It has been used as a supporting document for the *Business Architecture*, *Information Architecture* and *Endpoint Specification* documents.

For a description of each document delivered in the package, see the *Readers' Guide* [\[PATH-PRR-RG\]](#).

## **1.6 Terminology Used in this Document**

### **1.6.1 Subject of Care**

This document uses the term 'Subject of Care' to refer to the person who is the subject of the pathology result report. Most often this is the person who provides the specimen for the investigation. Tests on donor specimens are considered relevant towards to the recipient – the 'Subject of Care'. The terms 'patient' and 'client' are deemed to be synonymous terms.

### **1.6.2 Attestation**

Many of the data elements within this specification refer to the concept of an 'attestation' of the document. In this sense, attestation refers to the personal assertion of the truth of the information contained in the pathology result report. A document is said to be attested at the time it is authorised for external release. Depending upon defined business processes, this authorisation may be performed by the document author, or by another person.



## 2 Use Case Documentation

The use cases in this section provide specifications through which the production of a Pathology Result Report can adhere. The Pathology Result Report is issued by a Laboratory Information System (LIS) to an authorised clinician. An authorised clinician is either the requesting clinician or a clinician nominated by the requesting clinician on behalf of the Subject of Care.

The use cases also cover the possible variations which may occur in the reporting process such as the possibility that the report may be amended due to further results being made available or following the correction of earlier released results.

The following use cases are described here:

- Create Result
- Amend Result
- Receive Result

There are three types of acknowledgement that may potentially be associated with the receipt of a Pathology Result Report:

- **Message received by receiving system** acknowledgement, which indicates that the message has successfully arrived at the receiving system for processing (an analogy may be drawn to a letter being successfully delivered to a letterbox).
- **Message processed by receiving system** acknowledgement, which indicates that the receiving system has successfully processed the contents of the message (analogous to a letter being retrieved from an electronic letterbox by a computer, opened, read and understood by that computer).
- **Message contents read by a Clinician** acknowledgement, which indicates that a human readable form of the message has actually been read by a clinician (analogous to a letter being retrieved from a physical letterbox, opened, read and understood by a human).

The 'Message received by receiving system acknowledgement' is the only one of the three acknowledgements currently in scope for this release of the *Pathology Result Reporting Package*; it is defined in the HL7 v2.4 message profile detailed in [\[IF-PRR\]](#).

### 2.1 Structured Document Template Role

Pathology data stored within the Laboratory and Clinical Information Systems must be of sufficient detail that each system can capture, store and retrieve accurate pathology results. The Structured Document Template can assist system developers with the design of these systems by outlining common data terminology and a common data structure.

This role is strengthened by gathering pathology related information into the described structure. This will ensure interoperability between information systems because both sending and receiving systems will have a common understanding of the information that will be transferred between them.

It will also enable increased utilisation of the transferred information by the receiving systems because the information may be placed in the recipient's Clinical Information System (CIS).

## 2.2 Activity Diagram

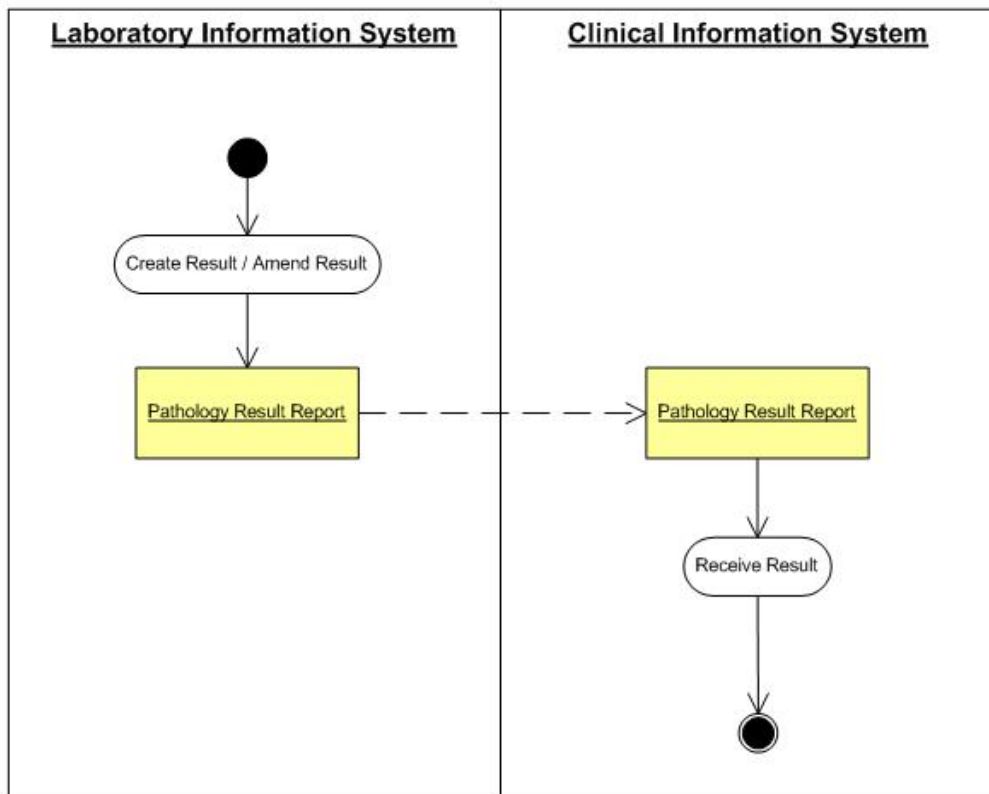


Figure 2: SDT Activity Diagram

## 2.3 Definitions

Property name	Brief description
Unique Identifier	A unique identifier to be used to distinguish the use case from others within the system or project boundary.
Name	The name of the use case.
Brief Description	A brief description of the primary goal, role and purpose of the use case.
Pre-Conditions	A pre-condition of a use case is a state that must be present prior to a use case being performed.
Triggers	Trigger events are possible events which would result in the use case being initiated. They are distinctly separate from the pre-conditions.
Flow of events	A stepped granular description of what occurs during the use case (not how specific problems are solved by the system). The description should be understandable by the business user or customer. Where the flow of events becomes cluttered due to complex behaviour, sub-flows can be used to improve clarity and manage the complexity.

Property name	Brief description
Alternate Flow of events	An alternate list of steps which may occur in a use case based on a decision point or transaction that may occur. Alternate flows of the use case may be used when the level of granularity required does not warrant separation of the decision points into separate use cases.
Exceptions	An exception is a possible event which would prevent the use case from executing completely. The number and level of detail specified in handling exception points is determined by the level of detail required to be contained in the use case.
Policies	A policy is a special requirement or constraint on the use case. Examples of policy include legal and regulatory requirements, application standards, and quality attributes of the system to be built including usability, reliability, performance or supportability requirements.
Post-Conditions	A post-condition of a use case is a list of possible states the system can be in immediately after a use case has finished.
Extension Points	A list of locations within the flow of events of the use case at which additional behaviour can be inserted using the extend relationship
Relationships	The relationships, such as <i>communicates-associations</i> , <i>include-</i> , <i>generalisation-</i> , and <i>extend-relationships</i> in which the use case participates.
Notes	Any other relevant notes, documents or files which add value to the understanding of the use case.

## 2.4 Use Case Actors

### 2.4.1 Clinical Information System (CIS)

Description:	The information system used by clinicians to support the clinical care of the Subject of Care. This system should support functions of receiving pathology results.
Aliases:	GP Desktop Software, Hospital CIS, Electronic Medical Record (EMR) System
Inherits:	None
Actor Type:	System, Primary

### 2.4.2 Laboratory Information System (LIS)

Description:	The information system used by the laboratory worker and pathologist to support the provision of pathology services.
Aliases:	Laboratory System, Pathology System
Inherits:	None
Actor Type:	System, Primary

### 2.4.3 Laboratory Worker

Description:	An individual who performs and/or reviews the results of pathology investigations within a laboratory environment and interacts with the LIS to store information necessary for the provision of pathology services and may be authorised to create and send Pathology Result Reports.
Aliases:	Scientist, Pathology Staff
Inherits:	None
Actor Type:	Person, Primary

### 2.4.4 Clinician

Description:	The individual physician providing care to an individual.
Aliases:	Specialist, Hospital Doctor, GP, Clinical Pathologist
Inherits:	None
Actor Type:	Person, Primary

### 2.4.5 Pathologist

Description:	An individual qualified in a medical specialty who: <ul style="list-style-type: none"> <li>performs and/or reviews the results of pathology investigations within a laboratory environment;</li> <li>interacts with the LIS to store information necessary for the provision of pathology services; and</li> <li>is authorised to create and send Pathology Result Reports.</li> </ul>
Aliases:	May be domain specific; e.g. Haematologist, Microbiologist, Anatomical Pathologist, Immunologist, Cytopathologist, Chemical Pathologist etc.
Inherits:	Clinician, Laboratory Worker
Actor Type:	Person, Primary

### 2.4.6 Requester

Description:	A Clinician who has requested one or more pathology investigations for an individual, results of which will be used in the clinical care of the individual.
Aliases:	Requesting Doctor, Requesting Clinician
Inherits:	Clinician
Actor Type:	Person, Primary

### 2.4.7 Automated Analyser

Description:	An analytical instrument that is used by the laboratory to perform pathology testing and is connected to the LIS. This device may receive instructions from the LIS, but must transmit results directly to the LIS.
Aliases:	Laboratory Analyser, LIS Enabled Analyser.
Inherits:	None
Actor Type:	System, Primary

## 2.5 Use Cases

### 2.5.1 Use Case – Create Result

Unique Identifier	UC-SDTPRR-1
Brief Description	Information from a LIS is used in conjunction with terminology to populate data elements in conformance with the SDT-PRR to create one or more result reports from pathology investigations.
Pre-Conditions	The LIS is capable of creating an electronic message which complies with the SDT-PRR.
Triggers	Initiated by a Laboratory Worker (which may be a Pathologist) or initiated by the LIS during or at the completion of pathology testing on a received specimen from a Subject of Care.
Flow of Events	<p>The Laboratory Worker and/or Automated Analyser inputs/transmits results to the LIS after the pathology tests have been performed.</p> <p>The Laboratory Worker uses existing processes within the LIS to initiate a Pathology Result Report.</p> <p>The Laboratory Worker authorises the Pathology Result Report.</p> <p>The LIS creates a message suitable for electronic communication, based on the SDT-PRR and the Interchange Format – Pathology Result Report [IF-PRR].</p> <p>The electronic communication containing the pathology report is transferred to a CIS for processing.</p>
Alternate Flow of Events	<p>The Laboratory Worker and/or Automated Analyser inputs/transmits results to the LIS.</p> <p>When results for the required tests have been entered into the LIS, automatic authorising rules (within the LIS) may trigger the authorisation of a Pathology Result Report.</p> <p>The LIS creates a message suitable for electronic communication, based on the PRR- SDT and the Interchange Format – Pathology Result Report [IF-PRR].</p> <p>The electronic communication containing the pathology report is transferred to a CIS for processing.</p>
Exceptions	
Policies	
Post-Conditions	The CIS is capable of receiving and processing the message generated by the LIS.
Extension Points	Amend Result
Relationships	
Notes	

### 2.5.2 Use Case – Amend Result

Unique Identifier	UC-SDTPRR-2
Brief Description	A LIS is used to amend pathology results and generate and send an amended Pathology Result Report message which complies with the SDT-PRR and [IF-PRR].
Pre-Conditions	The LIS has functionality to amend existing results and is capable of creating an electronic message which complies with the SDT-PRR.
Triggers	Results are amended in a LIS by the laboratory worker or pathologist and require information to be transferred to a CIS.
Flow of Events	Pathology results are amended within the LIS. The LIS creates an electronic message detailing the information and transfers this information to the CIS.
Alternate Flow of Events	
Exceptions	
Policies	
Post-Conditions	
Extension Points	
Relationships	
Notes	

### 2.5.3 Use Case Diagram - Create/Amend Result

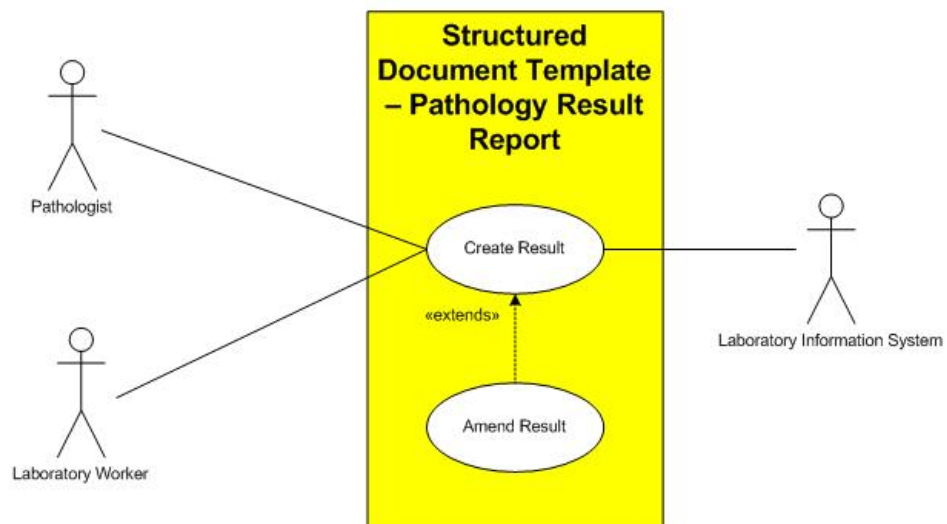


Figure 3: Use Case - Create / Amend Result

### 2.5.4 Use Case – Receive Result

Unique Identifier	UC-SDTPRR-3
Brief Description	Information transferred from a LIS is processed by the CIS.
Pre-Conditions	The CIS has the functionality to process and store result messages which comply with the SDT-PRR and IF-PRR.
Triggers	An electronic pathology result is received in the CIS for processing.
Flow of Events	<ol style="list-style-type: none"> <li>1. Electronic message detailing a pathology result is received.</li> <li>2. Information processed by the receiving system.</li> </ol>
Alternate Flow of Events	
Exceptions	
Policies	
Post-Conditions	
Extension Points	
Relationships	
Notes	

### 2.5.5 Use Case Diagram - Receive Result

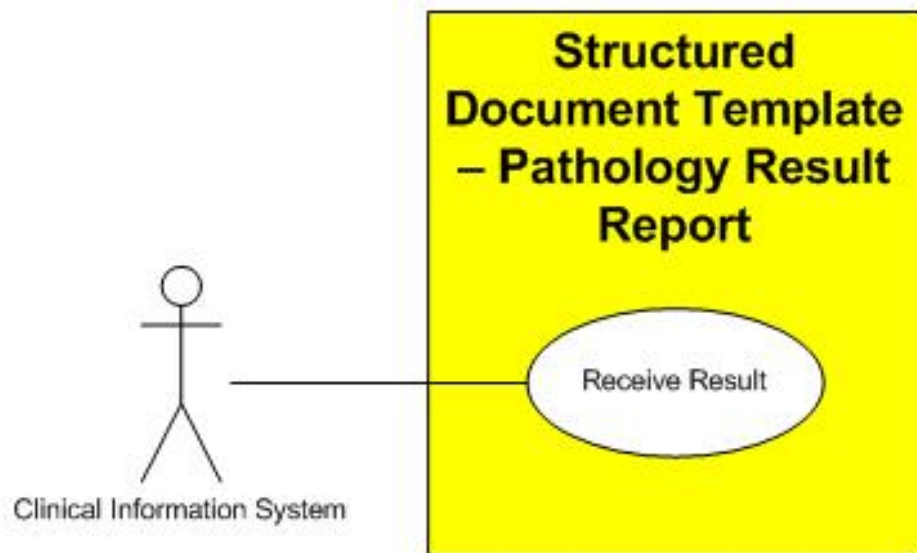


Figure 4: Use Case - Receive Result

# 3 UML Diagram

## 3.1 Pathology Episode

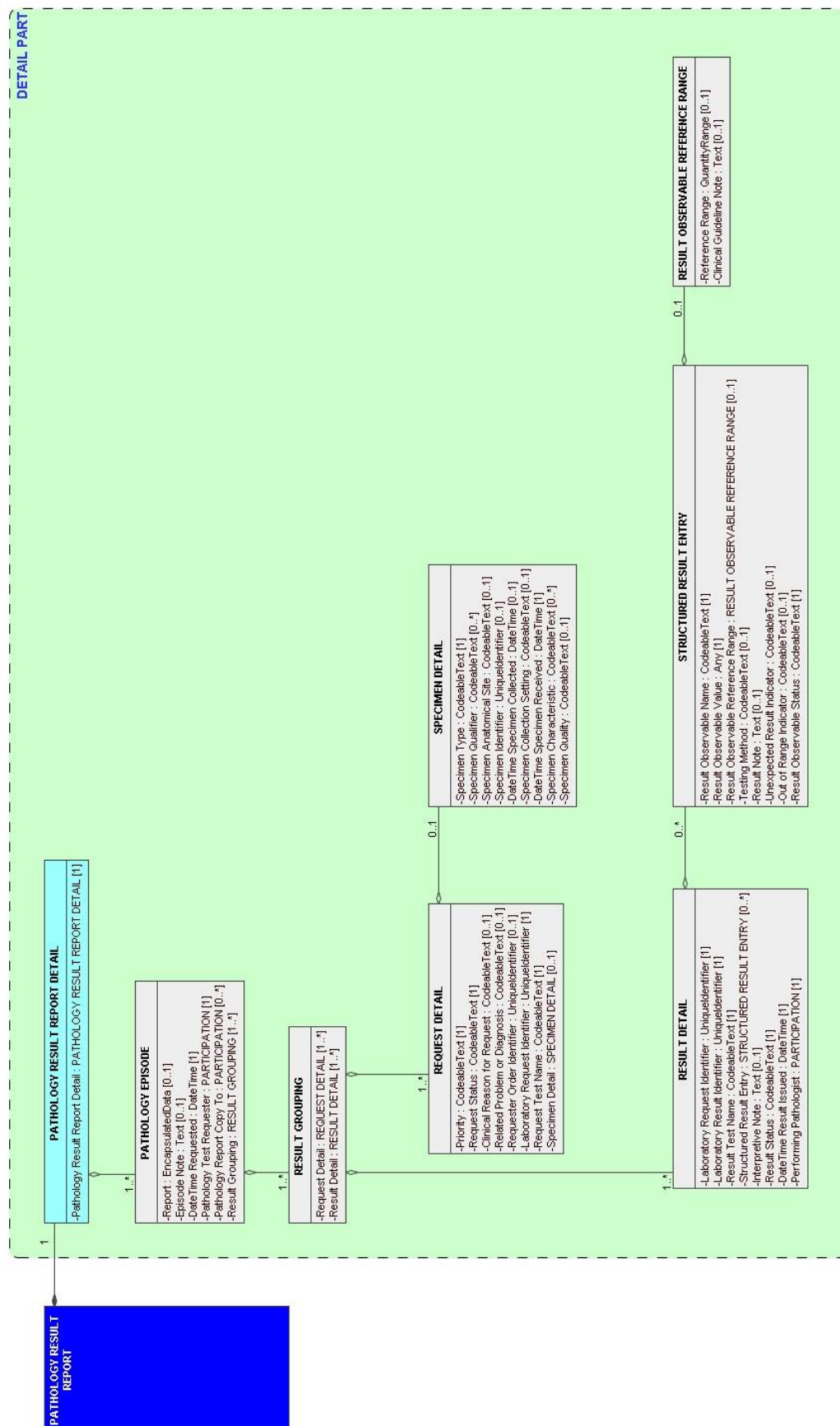


Figure 5: Pathology Result Report Detail UML diagram

### 3.2 Participant

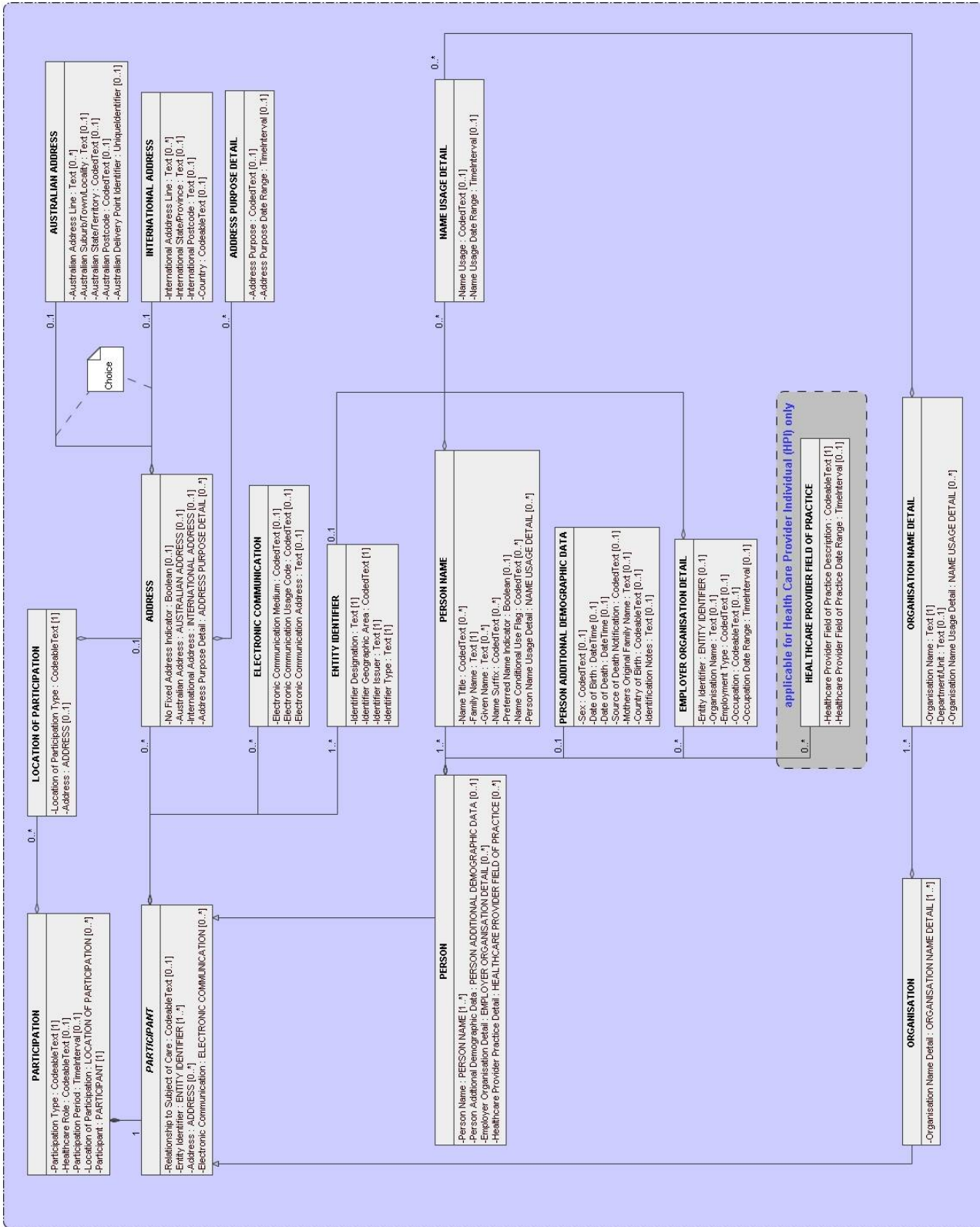











Figure 6: Participation Person/Organisation UML Diagram






## 4 Header

The Data Hierarchy provides a visual representation of the content and logical layout of the entire Pathology Result Report data structure. Individual data elements associated with the Participant data group are not displayed in the data hierarchy, thereby providing a more easily-read overview. Individual data elements for the PARTICIPATION data group and their hierarchical structure can be found in the *Data Specification - Participation* document [DS-PART].

The document header is generic to all Structured Document Templates and is defined in detail in the *Data Specification – Document Header* document [DS-DH]. Specific constraints related to the headers use for a Pathology Result Report are explained later in this section.

**Table 1: Pathology Result Report header**

	<b>Pathology Result Report</b>		
<b>HEADER</b>			
	HEALTH EVENT CONTEXT		!
	SUBJECT OF CARE (PARTICIPATION.PERSON)		!
	FACILITY (PARTICIPATION.ORGANISATION)		!
<b>T/T<sub>0</sub></b>	Care Setting		✓
	Clinical Process Identification		o ↻
	<b>ID</b>	Clinical Process Identifier	o
		DateTime Clinical Process Started	!
	DOCUMENT CONTEXT		!
	DOCUMENT CONTROL		!
	<b>ID</b>	Document Instance Identifier	!
	<b>ID</b>	Document Set Identifier	!
	<b>1<sup>2</sup>3</b>	Version Number	!
	<b>ID</b>	Document Originating System Identifier	!
	<b>T<sub>010</sub></b>	Document Type	!
	<b>1<sup>2</sup>3</b>	Document Type Version Number	!
	<b>T<sub>010</sub></b>	Confidentiality Indicator	!
		DateTime Attested	!
	<b>T<sub>010</sub></b>	Document Status	!

	<b>Pathology Result Report</b>		
	<b>T</b> <sub>010</sub>	Language (default to en-AU)	!
	DOCUMENT AUTHOR (PARTICIPATION.PERSON)		!
	DOCUMENT AUTHORISER/APPROVER (PARTICIPATION.PERSON)		o
	DOCUMENT RECIPIENTS		! ↻
	<b>T</b> <sub>010</sub>	Document Recipient Type	!
		DOCUMENT RECIPIENT (PARTICIPATION)	!

Each of the data groups in the header is described in the following sections, with specific information on the data that should be included for each data group in the context of a pathology result report sent from laboratory. For full details of the Document Header specification refer to [\[DS-DH\]](#).

## 4.1 Subject of Care





Contains details pertaining to the identification of the person who is the subject of the pathology result report. Information regarding the Subject of Care is included in the pathology result report for the following purposes:


- To comply with the obligation for pathology providers to have clear identification of individual patients in pathology reports (requires preferred name, date of birth and sex). [\[NPACC-2007\]](#)
- To enable linking of the report to the Subject of Care's electronic health records. Use of the Individual Healthcare Identifier (IHI) facilitates linking to all distributed health records. In the absence of an IHI for the Subject of Care, the identifier used by the test requester should be provided. If copying to other recipients, linking may be facilitated through the use of identifiers and/or demographic details (including name, date of birth, sex and permanent residential address details – refer [\[AS 5017-2006\]](#)).
- To enable follow-up of the Subject of Care. This may include clinical follow-up or follow-up for billing purposes. This information should therefore include the address at which the Subject of Care prefers to be contacted, billing address and preferred means of contact, be it telephone (home / business / mobile phone) or email address.

Table 2 below details how the information on the Subject of Care should be communicated in the pathology result report. Refer to [\[DS-PART\]](#) for full details of the participation data specification.

**Table 2: Subject of Care details**

Type	Name	Version	Obligation	Condition	Occ.
<b>T</b> / <b>T</b> <sub>010</sub>	Participation Type		Essential	<b>Must</b> be implemented	1
<b>T</b> / <b>T</b> <sub>010</sub>	Healthcare Role		Essential	<b>Must</b> be implemented and Healthcare Role.description='Subject of Care'	1

Type	Name	Version	Obligation	Condition	Occ.
	ENTITY IDENTIFIER		Essential	<p><b>Should</b> contain the Subject of Care's Individual Healthcare Identifier (IHI) if available.</p> <p>In the absence of an IHI, <b>must</b> contain the unique identifier used by the test requester to reference the Subject of Care.</p>	1..*
	ADDRESS		Essential	<p><b>Must</b> contain address information for the Subject of Care, which specifies the address type.</p> <p>Address information may be required to facilitate linking of the information to the Subject of Care's electronic record; and to facilitate clinical and/or billing follow-up. It may therefore be necessary to include multiple addresses to cover all these requirements.</p>	1..*
	ELECTRONIC COMMUNICATION DETAILS		Optional	<p>Inclusion of the Subject of Care's preferred means of contact <b>should</b> be included to facilitate clinical follow-up. A Subject of Care may have more than one method of contact.</p>	0..*
	PERSON NAME		Essential	<p><b>Must</b> contain name details and name usage type.</p> <p>Name may be required as both a visual prompt for reading the report, and as an electronic aid for linking to the Subject of Care's electronic record. It may therefore be necessary to include multiple names, including preferred and legal names (and known aliases)</p>	1..*

Type	Name	Version	Obligation	Condition	Occ.
	PERSON ADDITIONAL DEMOGRAPHIC DATA		Essential	<p><b>Must</b> contain the following details</p> <ul style="list-style-type: none"> <li>• Date of Birth (can be estimated)</li> <li>• Sex</li> </ul> <p><b>May</b> contain Date of Death if relevant.</p>	1

## 4.2 Facility Detail

The data group Facility Detail identifies the location and type of care setting where the Subject of Care was located at the time of the pathology request. It contains two components as follows:

- Care Setting – The broad category which defines where the Subject of Care was located at the time the pathology request was made. It is anticipated that a reference set using SNOMED CT-AU will be developed for this data element, however in the interim implementers should comply with the recommendations contained in AS4700.1 for the element PV1-2 (Patient class).
- Facility – Describes the physical location of the Subject of Care at the time the request for the pathology test was made. This would be either:
  - The ward, clinical unit and/or organisation where the Subject of Care was located at the time of ordering the test (if the Subject of Care is in hospital); or
  - The GP surgery or other community care setting from which the test was ordered.





It is included for the following reasons:

- To enable the pathologist and any recipients of the result to contact the facility responsible for ordering the report for any clinically relevant follow up reasons (requires name of facility, address and telephone contact details to be present).
- To provide some clinical context to the request – e.g. it may be clinically relevant that the test is being ordered for a Subject of Care who is currently an inpatient in an acute hospital, or to know that the test is being ordered via a GP surgery. This may be important both for the pathologist conducting the test, and any recipients of the pathology result report.

Table 3 below details how the information on the facility should be communicated in the pathology result report. Refer to [\[DS-PART\]](#) for full details of the participation data specification.

**Table 3: Facility Detail details**

Type	Name	Version	Obligation	Condition	Occ.
<b>T/T</b> <sub>010</sub>	Participation Type		Essential		1
<b>T/T</b> <sub>010</sub>	Healthcare Role		Essential		1

Type	Name	Version	Obligation	Condition	Occ.
	ENTITY IDENTIFIER		Essential	<b>Must</b> contain an identifier which will enable the receiving system to recognise the facility.  <b>Should</b> contain the facility's Healthcare Provider Identifier – Organisation (HPI-O) if available.	1..*
	ADDRESS		Desirable	<b>Should</b> contain an address for the facility.	0..*
	ELECTRONIC COMMUNICATION DETAILS		Desirable	<b>Should</b> contain telephone contact numbers.	0..*
	ORGANISATION NAME DETAILS		Essential	<b>Must</b> contain the organisation's name.	1

### 4.3 Clinical Process Identification

Identifies a healthcare event/encounter/clinical interaction or a series of healthcare events/encounters/clinical interactions defined and grouped according to a particular healthcare process.

This grouping:

- is determined by a healthcare provider
- is initiated to address certain health problems or issues
- can cover one or more illnesses
- can involve one or more providers
- can be on-going.

In relation to the Pathology Result Report, the DateTime Episode Started data element should contain the date and time that the GP consultation commenced for community pathology requests, or the admission date and time where the request is relevant to a hospital inpatient episode.

## 4.4 Document Control

Holds versioning information about the document instance that belong to the same logical document set, i.e. that are related to the same healthcare event/encounter/clinical interaction.

The Document Type, which is the name of the Structured Document Template used to create the document instance, shall be 'Pathology Result Report'.





## 4.5 Document Author (Reporting Pathologist)


The Document Author of a Pathology Result Report is the Reporting Pathologist. This is the person and organisation with primary responsibility for coordinating, collating and reporting the Pathology Result Report.

This enables the receiving system to know who the report has been sent by and where the acknowledgement should be sent.

Table 4 below details how the information on the reporting pathologist should be communicated in the pathology result report. Refer to [DS-PART] for full details of the participation data specification.

**Table 4: Document Author details**

Type	Name	Version	Obligation	Condition	Occ.
<b>T/T</b> <sub>010</sub>	Participation Type		Essential		1
<b>T/T</b> <sub>010</sub>	Healthcare Role		Essential		1
	ENTITY IDENTIFIER		Essential	<b>Must</b> contain an identifier which will enable the receiving system to identify the individual healthcare provider.  <b>Should</b> include a Healthcare Provider Identifier – Individual (HPI-I) if available.	1..*
	ADDRESS		Desirable	<b>Should</b> contain an address For the reporting Pathologist	0..*
	ELECTRONIC COMMUNICATION DETAILS		Essential	<b>Must</b> contain an electronic delivery address; and  <b>May</b> contain telephone contact details.	1..*
	PERSON NAME		Essential	<b>Must</b> contain name details.	1..*

Type	Name	Version	Obligation	Condition	Occ.
	EMPLOYER ORGANISATION DETAILS		Essential	<b>Must</b> contain laboratory name.	1

## 4.6 Document Authoriser/Approver

The Document Authoriser/Approver is the clinician responsible for authorising the release and distribution of the Pathology Result Report instance. Whether or not it is required depends upon the business practices of the particular laboratory.

## 4.7 Document Recipient (Pathology Report To)

Contains details pertaining to the recipient of this version of the Pathology Result Report.



Pathology Result Reports are provided to authorised Clinicians. An authorised clinician can be the clinician who requested the pathology service or a clinician nominated by the requesting clinician on behalf of the Subject of Care.





Each version of a Pathology Result Report is addressed to a particular authorised clinician.

There is an obligation for pathology providers to clearly identify the intended recipient of a pathology result report [RCPA-CIC-2004]. Identifying the recipient relates not only to the individual providers involved in the pathology communication process but also to the entity that the providers are employed by, or representing, in the course of the transaction.

Table 5 below details how the information on the document recipient should be communicated in the pathology result report. Refer to [DS-PART] for full details of the participation data specification.













**Table 5: Document Recipient details**







Type	Name	Version	Obligation	Condition	Occ.
<b>T/T</b> <sub>010</sub>	Participation Type		Essential		1
<b>T/T</b> <sub>010</sub>	Healthcare Role		Essential		1
	ENTITY IDENTIFIER		Essential	<b>Must</b> contain an identifier which will enable the receiving system to identify the individual healthcare provider who is to receive the report. <b>Should</b> include a HPI-I identifier if available.	1..*
	ADDRESS		Essential	<b>Must</b> contain an address	1..*

Type	Name	Version	Obligation	Condition	Occ.
	ELECTRONIC COMMUNICATION DETAILS		Essential	<b>Must</b> contain an electronic return message, delivery address.	1..*
	PERSON NAME		Essential	<b>Must</b> contain name details.	1..*
	EMPLOYER ORGANISATION DETAILS		Optional	<b>Should</b> be completed with an organisation name if relevant.	0..1
	ORGANISATION NAME DETAIL		Optional	Where the Document Recipient is a Healthcare Provider <b>must not</b> be implemented. Where the Document Recipient is a Healthcare Organisation <b>must</b> be implemented and contain name details and name usage type.	0..*

# 5 Pathology Result Report Detail

The body of the pathology result report contains the information regarding the pathology episode, as represented in the data hierarchy below.

		<b>PATHOLOGY RESULT REPORT DETAIL</b>		
	PATHOLOGY EPISODE			! ↻
	Report			○
<b>T</b>	Episode Note			○
	DateTime Requested			!
	PATHOLOGY TEST REQUESTER			!
	PATHOLOGY REPORT COPY TO			○ ↻
	RESULT GROUPING			! ↻
	REQUEST DETAIL			! ↻
	<b>T/T<sub>010</sub></b>	Priority		!
	<b>T/T<sub>010</sub></b>	Request Status		!
	<b>T/T<sub>010</sub></b>	Clinical Reason for Request		○
	<b>T/T<sub>010</sub></b>	Related Problem or Diagnosis		○
	<b>ID</b>	Requester Order Identifier		○
	<b>ID</b>	Laboratory Request Identifier		!
	<b>T/T<sub>010</sub></b>	Request Test Name		!
	SPECIMEN DETAIL			<i>a→b</i>
	<b>T/T<sub>010</sub></b>	Specimen Type		!
	<b>T/T<sub>010</sub></b>	Specimen Qualifier		<i>a→b</i> ↻
	<b>T/T<sub>010</sub></b>	Specimen Anatomical Site		<i>a→b</i>
	<b>ID</b>	Specimen Identifier		<i>a→b</i>
	DateTime Specimen Collected			○
	<b>T/T<sub>010</sub></b>	Specimen Collection Setting		○
	DateTime Specimen Received			!
	<b>T/T<sub>010</sub></b>	Specimen Characteristic		○ ↻
	<b>T/T<sub>010</sub></b>	Specimen Quality		○
	RESULT DETAIL			! ↻

 <b>PATHOLOGY RESULT REPORT DETAIL</b>					
			<b>ID</b>	Laboratory Request Identifier	!
			<b>ID</b>	Laboratory Result Identifier	!
			<b>T/T<sub>010</sub></b>	Result Test Name	!
				STRUCTURED RESULT ENTRY	<input type="radio"/> ↻
			<b>T/T<sub>010</sub></b>	Result Observable Name	!
			<b>any</b>	Result Observable Value	!
				RESULT OBSERVABLE REFERENCE RANGE	<input type="radio"/>
				 Reference Range	<input type="radio"/>
				<b>T</b> Clinical Guideline Note	<input type="radio"/>
			<b>T/T<sub>010</sub></b>	Testing Method	<input type="radio"/>
			<b>T</b>	Result Note	<input type="radio"/>
			<b>T/T<sub>010</sub></b>	Unexpected Result Indicator	<input type="radio"/>
			<b>T/T<sub>010</sub></b>	Out Of Range Indicator	<input type="radio"/>
			<b>T/T<sub>010</sub></b>	Result Observable Status	!
			<b>T</b>	Interpretive Note	<input type="radio"/>
				PERFORMING PATHOLOGIST	!
			<b>T/T<sub>010</sub></b>	Result Status	!
				DateTime Result Issued	!

Each of these data items are described on the following pages. Refer to [\[DS-GUIDE\]](#) for details of the datatypes and icons used.

## 5.1 PATHOLOGY EPISODE

### Identification



<b>Name</b>	PATHOLOGY EPISODE
<b>Metadata Type</b>	Data Group
<b>Identifier</b>	DG-11001
<b>Version</b>	2.0

### Definition






<b>Definition</b>	<p>A data group that contains the details pertaining to the requests, specimens and results of pathology investigations regarding a particular episode.</p> <p>A pathology episode is defined as one or more requested pathology tests, where the request meets the following conditions:</p> <ul style="list-style-type: none"> <li>• It was directed to a single primary performing laboratory (does not exclude the ability for this lab to forward a component of the request to a secondary laboratory)</li> <li>• It is from a uniquely identified requestor (who must be a health-care provider – individual)</li> <li>• It is for a uniquely identified Subject of Care</li> <li>• The request was made at a single point in time.</li> </ul> <p>This last condition does not exclude the ability to modify the request at a later time, however later requests to the same laboratory from the same requestor for the same Subject of Care which are not specifically sent through as an amendment to the initial request will result in a new Pathology Result Report being initiated.</p> <p>It is recommended that a single pathology result report contains the results for only one episode although the data structure does allow for reporting of multiple episodes within a single report.</p>
<b>Synonymous Names</b>	
<b>Notes</b>	The PATHOLOGY EPISODE data group is a high level grouping category for all data relating to a particular PATHOLOGY EPISODE.

## Relationships

### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">PATHOLOGY RESULT REPORT</a>	1.0	Essential		1..*

### Children

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">Report</a>		Optional		0..1
<b>T</b>	<a href="#">Episode Note</a>		Optional		0..1
	<a href="#">DateTime Requested</a>		Essential		1
	<a href="#">PATHOLOGY TEST REQUESTER</a>	1.0	Essential		1
	<a href="#">PATHOLOGY REPORT COPY TO</a>	1.0	Optional		0..*
	<a href="#">RESULT GROUPING</a>		Essential		1..*

## 5.2 Report

### Identification




<b>Name</b>	Report
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11019

### Definition

<b>Definition</b>	The report for the resulted episode returned by the pathology laboratory to the requesting provider.
<b>Synonymous Names</b>	
<b>Notes</b>	<p>This data element allows for a verbatim copy of the report with a single pathology episode to be communicated. The results reported should also, if possible, be supplied in a machine-readable structured form as per remaining data hierarchy. As some structured pathology information is unable to be stored and displayed correctly by receiving systems at this time, some structured pathology information (such as microbiology results) are sent in the same way as free text or images.</p> <p>This report section allows for unstructured pathology results such as images and free text, as well as information that the laboratory information system stores in a structured format.</p>
<b>Datatype</b>	EncapsulatedData

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">PATHOLOGY EPISODE</a>	2.0	Optional		0..1

## 5.3 Episode Note

### Identification

**T**

<b>Name</b>	Episode Note
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11032

### Definition


<b>Definition</b>	Comments provided by the reporting pathologist relevant to the resulted pathology episode.
<b>Synonymous Names</b>	Interpretive Note
<b>Notes</b>	Any additional information regarding the episode that affects the clinician's interpretation.
<b>Datatype</b>	Text

### Usage

<b>Examples</b>	Series of tests shows that a marked impairment of glucose tolerance is present. These results are consistent with diabetes mellitus.
-----------------	--

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">PATHOLOGY EPISODE</a>	2.0	Optional		0..1

## 5.4 DateTime Requested

### Identification



<b>Name</b>	DateTime Requested
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11002

### Definition

<b>Definition</b>	The date or date and time that a request was made.
<b>Synonymous Names</b>	Request Date, Request Date/Time, Date/Time of Transaction.
<b>Notes</b>	The date/time for the request refers to when the Requester completes a request for a pathology investigation.  This provides a point in time reference for linking of result data to request data, and a point in time reference within a health record that the clinician may refer to.
<b>Datatype</b>	DateTime

### Usage

<b>Conditions of Use</b>	It is preferable that exact dates and times are used for this data element.
<b>Misuse</b>	Entering approximate dates when an exact date is available.

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">PATHOLOGY EPISODE</a>	2.0	Essential		1

## 5.5 PATHOLOGY TEST REQUESTER

### Identification



<b>Name</b>	PATHOLOGY TEST REQUESTER
<b>Metadata Type</b>	Data Group
<b>Identifier</b>	DG-11003
<b>Version</b>	1.0

### Definition

<b>Definition</b>	The clinician who has requested the pathology investigation contained in this pathology episode.
<b>Synonymous Names</b>	Healthcare Provider Individual
<b>Notes</b>	<p>A test requester has the following responsibilities<sup>3</sup> in relation to the reporting of the results of the test:</p> <ol style="list-style-type: none"> <li>1. To ensure that overdue or missing results are obtained, viewed and acted upon without delay;</li> <li>2. To acknowledge receipt of reports from the pathology providers;</li> <li>3. To retain the result report as part of the patient record;</li> <li>4. To provide a mechanism for the pathology provider to communicate unexpected life-threatening test results.</li> </ol> <p>It is therefore important that their details are included on the pathology result report so that all recipients of the report are aware where these responsibilities lie and to provide a contact point for any necessary clinical follow-up.</p> <p>For full descriptions of the entire data hierarchy for a participant, including data element definitions and value domains, refer to the Participant Data Specification [DS-PART].</p>







### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">PATHOLOGY EPISODE</a>	2.0	Essential		1

<sup>3</sup> Taken from the RCPA Chain of Information Custody for the Pathology Request-Test-Report Cycle in Australia, 8/2004 accessed online 29/10/2008 at [http://www.sport.gov.au/internet/main/publishing.nsf/Content/FDD654D0C46DC374CA2573A0000A9C1A/\\$File/ChainInfoCustody.pdf](http://www.sport.gov.au/internet/main/publishing.nsf/Content/FDD654D0C46DC374CA2573A0000A9C1A/$File/ChainInfoCustody.pdf)

**Children**

Type	Name	Version	Obligation	Condition	Occ.
<b>T</b> / <b>T</b> <sub>010</sub>	Participation Type		Essential		1
<b>T</b> / <b>T</b> <sub>010</sub>	Healthcare Role		Essential		1
	ENTITY IDENTIFIER		Essential	<b>Must</b> contain an identifier which will enable the receiving system to identify the individual healthcare provider who is to receive the report. <b>Should</b> include a HPI-I identifier if available.	1..*
	ADDRESS		Essential	<b>Must</b> contain an address	1..*
	ELECTRONIC COMMUNICATION DETAILS		Essential	<b>Must</b> contain an electronic return message, delivery address. <b>Must</b> contain the healthcare provider's preferred telephone contact details.	1..*
	PERSON NAME		Essential	<b>Must</b> contain name details.	1..*
	EMPLOYER ORGANISATION DETAILS		Optional	<b>Should</b> be completed with an organisation name if relevant.	0..1
	ORGANISATION NAME DETAIL		Optional	Where the Document Recipient is a Healthcare Provider <b>must not</b> be implemented. Where the Document Recipient is a Healthcare Organisation <b>must</b> be implemented and contain name details and name usage type.	0..*

## 5.6 PATHOLOGY REPORT COPY TO

### Identification



<b>Name</b>	PATHOLOGY REPORT COPY TO
<b>Metadata Type</b>	Data Group
<b>Identifier</b>	DG-11004
<b>Version</b>	1.0

### Definition

<b>Definition</b>	Details pertaining to any additional recipients of the requests/results relating to this pathology episode.
<b>Synonymous Names</b>	Healthcare Provider Individual
<b>Notes</b>	<p>Included to enable the primary recipient to know who has (or is to) receive a copy of each resulted pathology episode. May be important for determining whether appropriate clinical follow-up has occurred.</p> <p>For full descriptions of the entire data hierarchy for a participant, including data element definitions and value domains, refer to the Participant Data Specification [DS-PART].</p>





### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	PATHOLOGY EPISODE	2.0	Optional		0..*

#### Children

Type	Name	Version	Obligation	Condition	Occ.
<b>T/T</b> <sub>010</sub>	Participation Type		Essential		1
<b>T/T</b> <sub>010</sub>	Healthcare Role		Essential		1
	ENTITY IDENTIFIER		Essential	<b>Must</b> contain an identifier which will enable the receiving system to identify the individual healthcare provider who is to receive the report. <b>Should</b> include a HPI-I identifier if available.	1..*
	ADDRESS		Essential	<b>Must</b> contain an address	1..*

Type	Name	Version	Obligation	Condition	Occ.
	ELECTRONIC COMMUNICATION DETAILS		Essential	<b>Must</b> contain an electronic return message, delivery address. <b>Must</b> contain the healthcare provider's preferred telephone contact details.	1..*
	PERSON NAME		Essential	<b>Must</b> contain name details.	1..*
	EMPLOYER ORGANISATION DETAILS		Optional	<b>Should</b> be completed with an organisation name if relevant.	0..1
	ORGANISATION NAME DETAIL		Optional	Where the Document Recipient is a Healthcare Provider <b>must not</b> be implemented. Where the Document Recipient is a Healthcare Organisation <b>must</b> be implemented and contain name details and name usage type.	0..*

## 5.7 RESULT GROUPING

### Identification



<b>Name</b>	RESULT GROUPING
<b>Metadata Type</b>	Data Group
<b>Identifier</b>	DG-11034

### Definition

<b>Definition</b>	A data group to allow related requests and results to be grouped together.
<b>Notes</b>	<p>With regard to ordering and testing procedures, Australian medical practices historically requested groups of tests as panels. Consequently, laboratory procedures and the Medicare Benefits Schedule payments system have evolved in concert with this pattern.</p> <p>This means that there is not necessarily a strict one-to-one relationship between the panels that are ordered and the set of results that are returned. Content-wise, what has been ordered is completed but this may not be so contextually. For example, if four distinct panels are ordered then the results may be rationalised into only two or three sets for reporting purposes.</p> <p>(Source: <a href="#">[HB 262-2008]</a> )</p> <p>Therefore, sectioning-related requests and results allows for reporting the following situations:</p> <ul style="list-style-type: none"> <li>• One test has been requested, one test has been performed;</li> <li>• Two or more requested tests have been combined into a single resulted test;</li> <li>• Two or more results have been performed for a single requested test; or</li> <li>• Multiple specimens are required to complete a particular requested test.</li> </ul> <p>A single pathology episode may have multiple Result Grouping sections to allow for multiple tests to be requested and resulted within an episode.</p>

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">PATHOLOGY EPISODE</a>	2.0	Essential		1..*

#### Children

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">REQUEST DETAIL</a>	1.0	Essential		1..*
	<a href="#">RESULT DETAIL</a>	1.0	Essential		1..*

## 5.8 REQUEST DETAIL

### Identification



<b>Name</b>	REQUEST DETAIL
<b>Metadata Type</b>	Data Group
<b>Identifier</b>	DG-11002
<b>Version</b>	2.0

### Definition

<b>Definition</b>	Details pertaining to a request(s) for pathology services.
<b>Synonymous Names</b>	Pathology Order, Diagnostic Investigation Request.
<b>Notes</b>	The purpose of including 'Request Detail' in a Pathology Result Report is to confirm the status and completion of the ordered tests back to the requesting system.

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	RESULT GROUPING		Essential		1..*

#### Children

Type	Name	Version	Obligation	Condition	Occ.
<b>T/T</b> <sub>010</sub>	Priority		Essential		1
<b>T/T</b> <sub>010</sub>	Request Status		Essential		1
<b>T/T</b> <sub>010</sub>	Clinical Reason for Request		Optional		0..1
<b>T/T</b> <sub>010</sub>	Related Problem or Diagnosis		Optional		0..1
<b>ID</b>	Requester Order Identifier		Optional		0..1
<b>ID</b>	Laboratory Request Identifier		Essential		1
<b>T/T</b> <sub>010</sub>	Request Test Name		Essential		1
	SPECIMEN DETAIL	1.0	Conditional	<b>Must</b> be completed if the requested test is to be performed on a specimen, otherwise <b>must not</b> be completed	0..1

## 5.9 Priority

### Identification



<b>Name</b>	Priority
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11001

### Definition


<b>Definition</b>	The urgency associated with the timing need of the result report as determined by the requester.
<b>Synonymous Names</b>	Urgency
<b>Notes</b>	Where a pathology test or investigation outcome is required in other than the routine turnaround time, this requirement should be communicated using mutually agreed terminology. The meaning of routine is to be agreed between a Laboratory and a Requester.  It is recommended that a default value of 'routine' should be used.
<b>Notes Source</b>	<a href="#">[RCPA-CIC-2004]</a>
<b>Datatype</b>	CodeableText
<b>Value Domain</b>	HL7 v2.4 Table 0027

### Usage

<b>Conditions of Use</b>	The level of priority should be in keeping with the level of urgency of the situation and any agreement among the Requester and the Laboratory.  Values should be populated in accordance with the recommendation within HL7 v2.4 Section 4.3.6 (see below).
<b>Values</b>	S = Stat A = ASAP R = Routine P = Preop T = Timing Critical
<b>Misuse</b>	Using a higher level of priority where not warranted.

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">REQUEST DETAIL</a>	2.0	Essential		1

## 5.10 Request Status

### Identification

T/T<sub>010</sub>

<b>Name</b>	Request Status
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11003

### Definition


<b>Definition</b>	The state of processing of the pathology investigation.
<b>Synonymous Names</b>	Order Status
<b>Notes</b>	The laboratory may provide updates to this status as the request moves between the various processing states.
<b>Datatype</b>	<a href="#">CodeableText</a>
<b>Value Domain</b>	HL7 v2.4 Table 0038

### Usage

<b>Examples</b>	CM = Order is completed IP = In process, unspecified
-----------------	---

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">REQUEST DETAIL</a>	2.0	Essential		1

## 5.11 Clinical Reason for Request

### Identification

T/T<sub>010</sub>

<b>Name</b>	Clinical Reason for Request
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11004

### Definition


<b>Definition</b>	Relevant clinical information pertaining to why the request for a pathology investigation was made.
<b>Synonymous Names</b>	Relevant Clinical Information
<b>Notes</b>	<p>The clinical reason should not include information about the individual's observed condition, provisional diagnosis, or the problem that the requester is trying to investigate.</p> <p>The information may indicate whether the approved pathology provider should determine which tests are necessary.</p> <p>Read together with the related problem or diagnosis, this information provides context and additional information for the reporter when analysing the diagnostic test result, and required testing.</p> <p>The information captured by this data element originates from the pathology request. Coded data for this data element should therefore originate from the requesting CIS. Terminology development for this item will be managed by the Pathology Request Package. The use of free text can only be excluded once the specified value domain has been determined to satisfy clinical requirements.</p>
<b>Datatype</b>	CodeableText
<b>Value Domain</b>	Not specified - Use existing reference sets until NEHTA determines a suitable common reference set.

### Usage

<b>Examples</b>	<p><b>Scenario 1</b>            Requested Test = Cytogenetic Test            Related Problem/Diagnosis = Leukaemia  <b>Clinical Reason for Request</b> = Treatment Monitoring</p>
	<p><b>Scenario 2</b>            Requested Test = Complete Blood Count            Related Problem/Diagnosis = Cardiovascular Disease  <b>Clinical Reason for Request</b> = Preoperative Screen</p>

## Relationships

### *Parent*

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">REQUEST DETAIL</a>	2.0	Optional		0..1

## 5.12 Related Problem or Diagnosis

### Identification

T/T<sub>010</sub>

<b>Name</b>	Related Problem or Diagnosis
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11005

### Definition


<b>Definition</b>	A description of the problem/diagnosis pertaining to the Subject of Care which is deemed clinically relevant to the generation of the pathology investigation.
<b>Synonymous Names</b>	
<b>Notes</b>	<p>Read together with the clinical reason for request, this information provides context and additional information for the reporter when analysing the diagnostic test result, and required testing.</p> <p>The information captured by this data element originates from the pathology request. Coded data for this data element should therefore originate from the requesting CIS. Terminology development for this item will be managed by the Pathology Request Package. The use of free text can only be excluded once the specified value domain has been determined to satisfy clinical requirements.</p>
<b>Datatype</b>	CodeableText
<b>Value Domain</b>	Not specified - Use existing reference sets until NEHTA determines a suitable common reference set.

### Usage

<b>Conditions of Use</b>	Problem / Diagnosis inclusion should be clinically relevant to the analysis and reporting of the pathology investigation.
<b>Examples</b>	<p><b>Scenario 1</b> Requested Test = Cytogenetic Test <b>Related Problem/Diagnosis</b> = Leukaemia Clinical Reason for Request = Treatment Monitoring</p> <p><b>Scenario 2</b> Requested Test = Complete Blood Count <b>Related Problem/Diagnosis</b> = Cardiovascular Disease Clinical Reason for Request = Preoperative Screen</p>
<b>Misuse</b>	Inclusion of all problems / diagnoses.

## Relationships

### *Parent*

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">REQUEST DETAIL</a>	2.0	Optional		0..1

## 5.13 Requester Order Identifier

### Identification

ID

<b>Name</b>	Requester Order Identifier
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11006

### Definition


<b>Definition</b>	A unique identifier assigned by the Requester's Clinical Information System (CIS) to identify the request.
<b>Synonymous Names</b>	Request Order Number, Order Number, Request Number (Requester), Placer Order Number
<b>Notes</b>	<p>The assigning of an identifier to a request by the Clinical Information System (CIS) enables tracking progress of the request and enables linking results to requests. It also provides a reference to assist with enquiries.</p> <p>This data element has been flagged as optional at this stage in recognition of the fact that very few electronic ordering systems exist. If electronic ordering is in place then the requester order identifier should be returned in the pathology result report.</p>
<b>Datatype</b>	UniqueIdentifier

### Usage

#### Examples

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	REQUEST DETAIL	2.0	Optional		0..1

## 5.14 Laboratory Request Identifier

### Identification

ID

<b>Name</b>	Laboratory Request Identifier
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11007

### Definition


<b>Definition</b>	A unique identifier assigned by the Laboratory Information System (LIS) to identify the request.
<b>Synonymous Names</b>	Request Number (Laboratory), Filler Order Number
<b>Notes</b>	The assigning of an identifier to a request by the Laboratory Information System (LIS) enables tracking progress of the request and enables linking results to requests. It also provides a reference to assist with enquiries.
<b>Datatype</b>	UniqueIdentifier

### Usage

#### Values

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">REQUEST DETAIL</a>	2.0	Essential		1

## 5.15 Request Test Name

### Identification

T/T<sub>010</sub>

<b>Name</b>	Request Test Name
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11017

### Definition


<b>Definition</b>	The term representing the requested pathology investigation. The term may represent a single analyte or a panel of grouped tests to be performed.
<b>Synonymous Names</b>	Request Name, Panel, Requested Test, Orderable Test
<b>Notes</b>	The Request Test Name term represents the testing required by the requester. Ideally, this data element in the Pathology Result Report should correspond with the request test name contained in the original request.
<b>Datatype</b>	CodeableText
<b>Value Domain</b>	NEHTA SNOMED CT-AU Request test name reference set (1021000036104)

### Usage

<b>Examples</b>	168132005 <i>Microscopy, culture and sensitivities</i> 79301008 <i>Electrolytes measurement</i> 66842004 <i>Red cell distribution with determination</i> 252416005 <i>Histopathology test</i>
-----------------	--

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">REQUEST DETAIL</a>	2.0	Essential		1

## 5.16 SPECIMEN DETAIL

### Identification



<b>Name</b>	SPECIMEN DETAIL
<b>Metadata Type</b>	Data Group
<b>Identifier</b>	DG-11005
<b>Version</b>	2.0

### Definition



<b>Definition</b>	<p>Details of the specimen provided for pathology testing in association with a single requested test.</p> <p>The specimen detail data group provides important information contributing to the correct pathology testing, and subsequent result analysis and interpretation.</p>
<b>Synonymous Names</b>	
<b>Notes</b>	<p>Relates to any specimen that can be examined using diagnostic methods.</p> <p>To enable linking of requests, results and specimens, only a single specimen can be associated with a single requested test. If it is desired to request multiple pathology tests to be performed upon a single specimen, then the specimen information <b>must</b> be repeated for each requested test.</p> <p>Similarly, to request the same pathology test to be performed upon multiple specimens, the requested test must be repeated and associated with the individual specimen information.</p>

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">REQUEST DETAIL</a>	2.0	Conditional	<b>Must</b> be completed if the requested test is to be performed on a specimen, otherwise <b>must not</b> be completed	0..1

**Children**

Type	Name	Version	Obligation	Condition	Occ.
<b>T/T</b> <sub>010</sub>	Specimen Type		Essential		1
<b>T/T</b> <sub>010</sub>	Specimen Qualifier		Conditional	<b>Essential</b> if specimen requires qualification	0..*
<b>T/T</b> <sub>010</sub>	Specimen Anatomical Site		Conditional	<b>Essential</b> if specimen has been taken from an anatomical site	0..1
<b>ID</b>	Specimen Identifier		Conditional	<b>Essential</b> if specimen has been labelled with an identifier	0..1
	DateTime Specimen Collected		Optional		0..1
<b>T/T</b> <sub>010</sub>	Specimen Collection Setting		Optional		0..1
	DateTime Specimen Received		Essential		1
<b>T/T</b> <sub>010</sub>	Specimen Characteristic		Optional		0..*
<b>T/T</b> <sub>010</sub>	Specimen Quality		Optional		0..1

## 5.17 Specimen Type

### Identification

T/T<sub>010</sub>

<b>Name</b>	Specimen Type
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11008

### Definition

**Definition** The categorisation of the sample collected and/or tested in a pathology investigation in relation to the Subject of Care.

#### Synonymous Names

#### Notes

Through combining the information contained in the [Request Test Name](#), [Specimen Type](#), [Specimen Qualifier](#) and [Specimen Anatomical Site](#), information regarding the pathology investigation can be communicated accurately and in a manner that allows semantic interoperability between disparate systems.

The specimen will usually be collected from the Subject of Care. However other specimen types that have an immediate clinical relevance to the Subject of Care are permissible. This includes:

- Donor material for which the Subject of Care is the recipient; and
- Unidentified material to which the Subject of Care has been exposed.

This data element represents the actual specimen that is to be analysed by the laboratory. This information should be sent at the time a request is made. This includes specimens that may be refined or modified from material collected from the Subject of Care. For example:

- Whole blood specimen (collected) to plasma/serum; and
- Pooled specimens used for analysis.

Environmental and non-clinical specimens do not relate to specific Subject of Care and therefore out of scope of for this document.

**Datatype** CodeableText


**Value Domain** NEHTA SNOMED CT-AU Specimen type reference set (4021000036102)

### Usage

<b>Examples</b>	119364003 <i>Serum specimen</i>
	258580003 <i>Whole blood sample</i>
	258453008 <i>Cyst fluid sample</i>
	119312009 <i>Catheter tip specimen</i>

## Relationships

### *Parent*

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">SPECIMEN DETAIL</a>	2.0	Essential		1

## 5.18 Specimen Qualifier

### Identification

T/T<sub>010</sub>

<b>Name</b>	Specimen Qualifier
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11009

### Definition


<b>Definition</b>	Information that defines characteristics of the specimen which need to be taken into consideration when analysing the specimen or interpreting the results.
<b>Synonymous Names</b>	
<b>Notes</b>	Through combining the information contained in the <a href="#">Request Test Name</a> , <a href="#">Specimen Type</a> , <a href="#">Specimen Qualifier</a> and <a href="#">Specimen Anatomical Site</a> , information regarding the pathology investigation can be communicated accurately and in a manner that allows semantic interoperability between disparate systems.
<b>Datatype</b>	CodeableText
<b>Value Domain</b>	NEHTA SNOMED CT-AU Specimen qualifier reference set (5021000036101)

### Usage

<b>Examples</b>	24863003 <i>Postprandial</i> 73775008 <i>Morning</i>
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### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">SPECIMEN DETAIL</a>	2.0	Conditional	<b>Essential</b> if specimen requires qualification	0..*

## 5.19 Specimen Anatomical Site

### Identification

T/T<sub>010</sub>

<b>Name</b>	Specimen Anatomical Site
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11010

### Definition


<b>Definition</b>	The categorisation of the anatomical site from which a specimen was obtained from an individual for pathology investigation.
<b>Synonymous Names</b>	Specimen site
<b>Notes</b>	<p>Through combining the information contained in the <a href="#">Request Test Name</a>, <a href="#">Specimen Type</a>, <a href="#">Specimen Qualifier</a> and <a href="#">Specimen Anatomical Site</a>, information regarding the pathology investigation can be communicated accurately and in a manner that allows semantic interoperability between disparate systems.</p> <p>This data element is only required when the information is clinically useful. For example, Specimen Anatomical Site information is generally not required for routine blood tests.</p> <p>Note that the requirement for a qualifier for this data element is currently being investigated and may be included in future releases of this document.</p>
<b>Datatype</b>	CodeableText
<b>Value Domain</b>	NEHTA SNOMED CT-AU Specimen anatomical site reference set (6021000036108)

### Usage

<b>Examples</b>	<p>4907600 <i>Knee joint structure</i></p> <p>76752008 <i>Breast structure</i></p>
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### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">SPECIMEN DETAIL</a>	2.0	Conditional	<b>Essential</b> if known and clinically relevant to the interpretation of the result.	0..1

## 5.20 Specimen Identifier

### Identification

ID

<b>Name</b>	Specimen Identifier
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11012

### Definition


<b>Definition</b>	An identifier given to the specimen submitted for pathology investigation.
<b>Synonymous Names</b>	
<b>Notes</b>	<p>The assignment of an identifier to a specimen allows the tracking of the specimen through receipt, processing, analysis, reporting and storage within the laboratory.</p> <p>This identifier may be placed on several vials of the same specimen type collected at the same time (as in the case of blood vials).</p>
<b>Datatype</b>	UniqueIdentifier

### Usage

<b>Conditions of Use</b>	It is desirable that each specimen has an identifier
<b>Examples</b>	

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	SPECIMEN DETAIL	2.0	Conditional	<b>Essential</b> if specimen has been labelled with an identifier	0..1

## 5.21 DateTime Specimen Collected

### Identification



<b>Name</b>	DateTime Specimen Collected
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11013

### Definition

<b>Definition</b>	The date or date and time that the specimen was collected from the Subject of Care by the specimen collector.
<b>Synonymous Names</b>	Collected Date/Time, Observation Date/Time, Collection Date/Time
<b>Notes</b>	This provides a point in time reference for linking of result data to request data, and a point in time reference within a health record that the clinician may refer to.
<b>Datatype</b>	DateTime

### Usage

<b>Conditions of Use</b>	This data element should be completed with an exact date and time wherever possible. Where this is not possible, approximate and estimated dates that comply with <a href="#">[ISO 8601-2004]</a> are permitted.
<b>Misuse</b>	Entering approximate dates when an exact date is available.

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">SPECIMEN DETAIL</a>	2.0	Desirable		0..1

## 5.22 Specimen Collection Setting

### Identification

T/T<sub>010</sub>

<b>Name</b>	Specimen Collection Setting
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11011

### Definition


<b>Definition</b>	Identification of the setting at which the specimen was collected from a Subject of Care.
<b>Synonymous Names</b>	
<b>Notes</b>	<p>This specifies the specimen collection location within the healthcare environment. It enables the laboratory to ask questions about the collection of the specimen, if required. The specimen collection setting may provide additional information relevant to the analysis of the result data.</p> <p>The specimen is often collected by a healthcare provider, but may be collected directly by the Subject of Care or the Subject of Care's carer at home.</p>
<b>Datatype</b>	CodeableText
<b>Value Domain</b>	Not specified - Use existing reference sets until NEHTA determines a suitable common reference set.

### Usage

<b>Conditions of Use</b>	Information to be provided by the person who collects the specimen, at the time of collection.
<b>Examples</b>	<ul style="list-style-type: none"> <li>• Specimen Collection Centre</li> <li>• GP Surgery</li> <li>• Hospital Ward</li> </ul>

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">SPECIMEN DETAIL</a>	2.0	Optional		0..1

## 5.23 DateTime Specimen Received

### Identification



<b>Name</b>	DateTime Specimen Received
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11014

### Definition

<b>Definition</b>	The date or date and time that the specimen was received in the primary performing laboratory.
<b>Synonymous Names</b>	Received Date/Time
<b>Notes</b>	This provides a point in time reference for the linking of result data to request data, and a point in time reference within a health record that the clinician may refer to.
<b>Datatype</b>	DateTime

### Usage

<b>Conditions of Use</b>	This data element should be completed with an exact date and time wherever possible. Where this is not possible, approximate and estimated dates that comply with <a href="#">[ISO 8601-2004]</a> are permitted.
<b>Misuse</b>	Entering approximate dates when an exact date is available.

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">SPECIMEN DETAIL</a>	2.0	Essential		1

## 5.24 Specimen Characteristic

### Identification

T/T<sub>010</sub>

<b>Name</b>	Specimen Characteristic
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11015

### Definition


<b>Definition</b>	The clinical findings on initial morphological analysis of a specimen (by a reporting Pathologist or Laboratory Worker) identifying artefacts or characteristics that may impact the result.
<b>Synonymous Names</b>	
<b>Notes</b>	The Specimen Characteristic data element describes the particular characteristics of the specimen that may affect analysis and interpretation of the pathology test result. For example: sample size or damage.  The characteristics may be judged suitable or unsuitable for pathology testing using the <a href="#">Specimen Quality</a> data element.
<b>Datatype</b>	CodeableText
<b>Value Domain</b>	NEHTA SNOMED CT-AU Specimen characteristic reference set (32566021000036108)

### Usage

<b>Examples</b>	118128002 <i>Sample haemolysed</i> 118127007 <i>Sample lipaemic</i>
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### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">SPECIMEN DETAIL</a>	2.0	Optional		0..*

## 5.25 Specimen Quality

### Identification



<b>Name</b>	Specimen Quality
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11016

### Definition

<b>Definition</b>	An assessment of the 'suitability for testing' of the specimen collected for analysis.
<b>Synonymous Names</b>	
<b>Notes</b>	<p>The Specimen Quality data element provides an indication of whether the specimen is suitable for the required laboratory testing.</p> <p>Assessment of specimen quality for a particular test is important for reliable analysis and subsequent interpretation of results. For Example:</p> <ul style="list-style-type: none"> <li>• If a tissue sample is crushed or too small, histological assessment may not be optimal; or</li> <li>• Certain analytes may not be reliably measured in a haemolysed serum specimen.</li> </ul> <p>The <a href="#">Specimen Characteristic</a> describes the attributes of the sample that may bias the result, for example sample size or damage. The characteristics may be judged suitable or unsuitable using the Specimen Quality data element.</p>
<b>Datatype</b>	CodeableText
<b>Value Domain</b>	NEHTA SNOMED CT-AU Specimen quality reference set (32567021000036105)

### Usage

<b>Examples</b>	125152006 <i>Specimen satisfactory for evaluation</i> 125154007 <i>Specimen unsatisfactory for evaluation</i>
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### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">SPECIMEN DETAIL</a>	2.0	Optional		0..1

## 5.26 RESULT DETAIL

### Identification



<b>Name</b>	RESULT DETAIL
<b>Metadata Type</b>	Data Group
<b>Identifier</b>	DG-11007
<b>Version</b>	2.0

### Definition




<b>Definition</b>	Details of a pathology test result.
<b>Synonymous Names</b>	
<b>Notes</b>	<p>Results can be compound in nature, such as an electrolyte battery. Often a report is issued which describes, both quantitatively and qualitatively, the findings.</p> <p>Where results are known, this grouping provides the relevant information pertaining to the results of a specific pathology test. Details such as the laboratory reference number, the name of the test that was performed, who performed the testing, and interpretation of the results are provided to assist clinicians with their treatment of the Subject of Care.</p> <p>This data group is repeatable as there is not necessarily a strict one-to-one relationship between the panels that are ordered and the set of results that are returned. Content-wise, what has been ordered is completed but this may not be so contextually. Repeating this data group allows for the situation where two or more results have been performed for a single requested test.</p>

### Relationships

#### *Parent*

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">RESULT GROUPING</a>	1.0	Essential		1..*

**Children**

Type	Name	Version	Obligation	Condition	Occ.
<b>ID</b>	Laboratory Request Identifier		Essential		1
<b>ID</b>	Laboratory Result Identifier		Essential		1
<b>T/T<sub>010</sub></b>	Result Test Name		Essential		1
	STRUCTURED RESULT ENTRY		Optional		0..*
<b>T</b>	Interpretive Note		Optional		0..1
	PERFORMING PATHOLOGIST		Essential		1
<b>T/T<sub>010</sub></b>	Result Status		Essential		1
	DateTime Result Issued		Essential		1

## 5.27 Laboratory Request Identifier

### Identification

ID

<b>Name</b>	Laboratory Request Identifier
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11007

### Definition


<b>Definition</b>	A unique identifier assigned by the Laboratory Information System (LIS) to identify the request.
<b>Synonymous Names</b>	Request Number (Laboratory), Filler Order Number
<b>Notes</b>	This is a repeat of the Laboratory Request Identifier which is allocated against the request. Repeating the identifier within the result enables linking of results to requests.
<b>Datatype</b>	UniqueIdentifier

### Usage

#### Values

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">RESULT DETAIL</a>	2.0	Essential		1

## 5.28 Laboratory Result Identifier

### Identification

ID

<b>Name</b>	Laboratory Result Identifier
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11018

### Definition


<b>Definition</b>	The identifier given to the laboratory result of a pathology investigation.
<b>Synonymous Names</b>	Lab Number
<b>Notes</b>	The assignment of an identification code to a result allows the linking of a result to a request within the laboratory.
<b>Datatype</b>	UniqueIdentifier

### Usage

#### Examples

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	RESULT DETAIL	2.0	Essential		1

## 5.29 Result Test Name

### Identification



<b>Name</b>	Result Test Name
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11031

### Definition


<b>Definition</b>	The term representing the pathology investigations completed by the pathologist. The term may represent a single analyte or a panel of grouped tests that have been performed.
<b>Synonymous Names</b>	Result Name, Panel, Resulted Test
<b>Notes</b>	<p>The Result Test Name term represents the testing procedure completed by the pathologist, and forms part of the result generated for clinical communication.</p> <p>Result Test Name is designed to hold a description of the pathology investigation and aligns with concepts from the procedure hierarchy from SNOMED CT.</p> <p>Associated components such as <a href="#">Specimen Type</a> and <a href="#">Specimen Qualifier</a> are referenced in separate fields.</p> <p>For example the Result Test Name  36048009 <i>Glucose measurement</i>  is represented separately to the <a href="#">Specimen Type</a> of  119364003 <i>Serum specimen</i>  and <a href="#">Specimen Qualifier</a> of  255226008 <i>Random</i> .</p>
<b>Datatype</b>	CodeableText
<b>Value Domain</b>	NEHTA SNOMED CT-AU Result test name reference set (2021000036107).

### Usage

<b>Conditions of Use</b>	Result Test Name should be used to convey information about the pathology investigation.
<b>Examples</b>	<p>43396009 <i>Haemoglobin A1c Measurement</i></p> <p>127800008 <i>Microscopic Urinalysis</i></p> <p>313505009 <i>CD34 stem cell count procedure</i></p>

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">RESULT DETAIL</a>	2.0	Essential		1

## 5.30 STRUCTURED RESULT ENTRY

### Identification



<b>Name</b>	STRUCTURED RESULT ENTRY
<b>Metadata Type</b>	Data Group
<b>Identifier</b>	DG-11008
<b>Version</b>	2.0

### Definition

<b>Definition</b>	The results of a pathology test to determine an aspect of the health status of a Subject of Care acquired through examination of specimens such as tissue, fluid or cells, that are able to be reported and received in a structured (atomic) format.
<b>Synonymous Names</b>	Result sub-data group
<b>Notes</b>	<p>The Structured Result Entry presently covers a range of pathology test results. These are primarily quantitative, such as biochemical tests.</p> <p>As receiving systems mature and as synoptic or semi structured reporting becomes more widespread, sub data group modules may be created to include these speciality test result types.</p> <p>Each instance of this data group describes a single observation.</p>

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	RESULT DETAIL	2.0	Optional		0..*

#### Children

Type	Name	Version	Obligation	Condition	Occ.
<b>T/T</b> <sub>010</sub>	Result Observable Name		Essential		1
<b>any</b>	Result Observable Value		Essential		1
	RESULT OBSERVABLE REFERENCE RANGE		Optional		0..1
<b>T/T</b> <sub>010</sub>	Testing Method		Optional		0..1
<b>T</b>	Result Note		Optional		0..1
<b>T/T</b> <sub>010</sub>	Unexpected Result Indicator		Optional		0..1
<b>T/T</b> <sub>010</sub>	Out Of Range Indicator		Optional		0..1
<b>T/T</b> <sub>010</sub>	Result Observable Status		Essential		1

## 5.31 Result Observable Name

### Identification



<b>Name</b>	Result Observable Name
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11022

### Definition


<b>Definition</b>	The term given to a single result element of a pathology test.
<b>Synonymous Names</b>	
<b>Notes</b>	<p>Can refer to a single pathology test result or to one component of a result group; e.g. urine sodium measurement.</p> <p>The result observable name is used by the pathology laboratory to describe the single test element that has been carried out and is being reported on. It is linked to the test detail, specimen and result detail.</p> <p><i>See also</i> <a href="#">Request Test Name</a>, <a href="#">Result Test Name</a></p>
<b>Datatype</b>	CodeableText
<b>Value Domain</b>	Not specified - Use existing reference sets until NEHTA determines a suitable common reference set.

### Usage

<b>Examples</b>	<p>11149-2 – <i>Sodium</i></p> <p>11148-4 - <i>Potassium</i></p> <p>12180-6 – <i>Calcium.Ionized</i></p>
-----------------	--

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">STRUCTURED RESULT ENTRY</a>	2.0	Essential		1

## 5.32 Result Observable Value

### Identification

any

<b>Name</b>	Result Observable Value
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11023

### Definition


<b>Definition</b>	The pathology test result observable value component.
<b>Synonymous Names</b>	
<b>Notes</b>	<p>The datatype of the result observable value is dependent upon the type of pathology investigation being conducted.</p> <p>For numeric results use <i>RealNumber / Quantity / QuantityRange / Duration</i>. For the units component of a numeric result (where applicable), use the RCPA Broadsheet No. 29 as recommended by <a href="#">[AS4700.2 – 2007]</a>.</p> <p>For text results including narratives use <a href="#">Text</a>.</p> <p>For coded results use <i>CodeableText</i>.</p> <p>For details for these datatypes refer to <a href="#">[DS-GUIDE]</a>.</p>
<b>Datatype</b>	Dynamic

### Usage

<b>Examples</b>	<ul style="list-style-type: none"> <li>• 140 mmol/L</li> <li>• ++</li> <li>• Negative</li> <li>• &lt; 75</li> <li>• 140-500 mmol/L</li> </ul>
-----------------	---

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">STRUCTURED RESULT ENTRY</a>	2.0	Essential		1

## 5.33 RESULT OBSERVABLE REFERENCE RANGE

### Identification



<b>Name</b>	RESULT OBSERVABLE REFERENCE RANGE
<b>Metadata Type</b>	Data Group
<b>Identifier</b>	DG-11024
<b>Version</b>	2.0

### Definition


**Definition** A data group containing information about appropriate reference interval for the specific result observable.

**Synonymous Names**


**Notes**

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">STRUCTURED RESULT ENTRY</a>	2.0	Desirable		0..1

#### Children

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">Reference Range</a>	2.0	Desirable		0..1
<b>T</b>	<a href="#">Clinical Guideline Note</a>	2.0	Desirable		0..1

## 5.34 Reference Range

### Identification



<b>Name</b>	Reference Range
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11024

### Definition


<b>Definition</b>	The upper and lower reference values for a pathology observable test result as determined from an appropriate reference population.
<b>Synonymous Names</b>	Reference Interval
<b>Notes</b>	<p>For use with quantitative pathology tests to serve as an indicator of the expected quantitative result for a healthy person, providing indication of direction and relative level of change from the reference population.</p> <p>It should be noted that reference ranges are sometimes laboratory specific. The reference range is selected by the laboratory to match the Subject of Care's demographics – particularly age and sex.</p>
<b>Datatype</b>	QuantityRange

### Usage

<b>Conditions of Use</b>	To be used where a properly determined reference range applies to particular test and specimen.
<b>Examples</b>	<p>15-58 g/L</p> <p>&lt; 15 mmol/L</p>

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	RESULT OBSERVABLE REFERENCE RANGE	2.0	Desirable		0..1

## 5.35 Clinical Guideline Note

### Identification

T

<b>Name</b>	Clinical Guideline Note
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11033

### Definition


<b>Definition</b>	Extra comments that may provide further context to the reference range or provide clinical guidelines when no single reference range is appropriate.
<b>Synonymous Names</b>	
<b>Notes</b>	
<b>Datatype</b>	Text

### Usage

<b>Examples</b>	<p><b>Scenario 1:</b> Result Observable Name: CA-125 Reference Range: &lt;35 u/mL <b>Clinical Guideline Note:</b> In pre-menopausal women levels vary during a normal cycle. Highest values are seen just prior to and during menstruation. Levels as high as 80 u/ml are not uncommon.</p> <p><b>Scenario 2:</b> Result Observable Name: HBA1c Reference Range: Null <b>Clinical Guideline Note:</b> The goal of diabetes therapy should be an HbA1c level of &lt;7%. At levels &gt;9.0% treatment should be re-evaluated, with consideration given to more intensive management. <u>Suggested HbA1c Guidelines:</u> 6.1-7.0% HbA1c: very good control 7.1-8.0% HbA1c: adequate control 8.1-9.0% HbA1c: sub-optimal control &gt;9.0% HbA1c: poor control</p>
-----------------	---

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	RESULT OBSERVABLE REFERENCE RANGE	2.0	Desirable		0..1

## 5.36 Testing Method

### Identification

T/T<sub>010</sub>

<b>Name</b>	Testing Method
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11025

### Definition


<b>Definition</b>	A description of the specific analytical principle or method used by the laboratory to perform the analyses and produce the result for the reported observation.
<b>Synonymous Names</b>	Observation Method
<b>Notes</b>	<p>Certain method-analyte combinations can have a critical impact on the comparability of results. A decision on diagnosis can be affected by the method used based on likelihood of false or true positives and negatives related to sensitivities and specificities of tests.</p> <p>Associated with the <a href="#">Result Test Name</a> and <a href="#">Specimen Type</a></p> <p>The testing method is chosen by the performing pathologist and/or pathology laboratory.</p> <p>NEHTA are currently investigating whether an additional test method qualifier data element (with the potential to be repeated as necessary) is required (e.g. Albumen Measurement, Urine, Quantitative).</p>
<b>Datatype</b>	CodeableText
<b>Value Domain</b>	NEHTA SNOMED CT-AU Testing method reference set (3021000036100)

### Usage

<b>Conditions of Use</b>	To be used to describe method used, especially in cases where the method has a bearing on the result interpretation and comparability in cumulative reports.
<b>Examples</b>	<p>54826005 <i>Chromatography measurement</i></p> <p>117259009 <i>Microscopy</i></p>

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">STRUCTURED RESULT ENTRY</a>	2.0	Optional		0..1

## 5.37 Result Note

### Identification

**T**

<b>Name</b>	Result Note
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11026

### Definition


<b>Definition</b>	Comments on the result of a pathology observable result.
<b>Synonymous Names</b>	
<b>Notes</b>	In the structured result sub-group this data element provides for pathologist comment on observable test results. Result interpretive comments go into the <a href="#">Interpretive Note</a> data element.  Where a panel is performed, a note might be attached for each test component of the panel to provide additional non-interpretive information relating to the result.
<b>Datatype</b>	Text

### Usage

<b>Conditions of Use</b>	Pathologist input is encouraged as this information is of benefit to Subject of Care outcomes.
<b>Examples</b>	Manual platelet count

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">STRUCTURED RESULT ENTRY</a>	2.0	Optional		0..1

## 5.38 Unexpected Result Indicator

### Identification

T/T<sub>010</sub>

<b>Name</b>	Unexpected Result Indicator
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11027

### Definition


<b>Definition</b>	Indicates the degree of diagnostic significance associated with a pathology test result based on all the available clinical information (including but not limited to the reference range).
<b>Synonymous Names</b>	
<b>Notes</b>	<a href="#">Result Observable Value</a> , <a href="#">Reference Range</a> , <a href="#">Out Of Range Indicator</a> and <a href="#">Unexpected Result Indicator</a> together combine to provide the complete result.
<b>Datatype</b>	CodeableText
<b>Value Domain</b>	NEHTA SNOMED CT-AU Unexpected result indicator reference set (32568021000036109)

### Usage

<b>Examples</b>	<b>Scenario:</b> Related problem or diagnosis = Stage IV Chronic Lymphocytic Leukaemia Result Test Name = Complete Blood Count (CBC) Result Observable Test Name = Platelet Count Result Observable Value = 80 x 10 <sup>9</sup> /L Reference Range = 130-350 x 10 <sup>9</sup> /L Out of Range Indicator = Below reference range Unexpected Result Indicator = Within normal limits for this condition
-----------------	--

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">STRUCTURED RESULT ENTRY</a>	2.0	Optional		0..1

## 5.39 Out Of Range Indicator

### Identification

T<sub>010</sub>

<b>Name</b>	Out Of Range Indicator
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11028

### Definition


<b>Definition</b>	Indicates whether the result is within or outside of its reference ranges. This indicator may also describe the relative amount the result is lower or higher than the reference range.
<b>Synonymous Names</b>	Out of range flag
<b>Notes</b>	This data element is used within structured result entry data group for numerical results only. It relates to the number value and reference range for that particular test.
<b>Datatype</b>	CodedText
<b>Value Domain</b>	NEHTA SNOMED CT-AU Out of range indicator reference set (32569021000036103)

### Usage

<b>Conditions of Use</b>	To be used only when the structured result entry data group is used, and in conjunction with a numerical result observable value and a reference range specific to that test.
<b>Examples</b>	281303003 <i>Above therapeutic range</i> 394843001 <i>Below low reference limit</i>
<b>Misuse</b>	Reporting only the out of range indicator without the associated report information.

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">STRUCTURED RESULT ENTRY</a>	2.0	Optional		0..1

## 5.40 Result Observable Status

### Identification

T/T<sub>010</sub>

<b>Name</b>	Result Observable Status
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11029

### Definition


<b>Definition</b>	The status of the observable result as indicated by the <a href="#">PERFORMING PATHOLOGIST</a> .
<b>Synonymous Names</b>	
<b>Notes</b>	<p>Status refers to the stage which the pathology observable testing and reporting has reached. For example, this could occur when a test has two parts with the results from the first part being a preliminary result and the second part concluding the report.</p> <p>The status of the observable result is included on a report to inform the requester or receiver of the report whether the observable result is final or there is more to expect, or if amendments have been made. This indicates whether the report observable result is able to be acted upon by the clinician.</p>
<b>Datatype</b>	CodeableText
<b>Value Domain</b>	HL7 v2.4 Table 0085

### Usage

<b>Examples</b>	<p>P Preliminary Results</p> <p>F Final Results</p> <p>S Partial Results</p> <p>C Record coming over is a correction and thus replaces a final result</p>
-----------------	---

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">STRUCTURED RESULT ENTRY</a>	2.0	Essential		1

## 5.41 Interpretive Note

### Identification

**T**

<b>Name</b>	Interpretive Note
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11020

### Definition


<b>Definition</b>	Interpretive comments relevant to the resulted pathology test carried out as provided by the reporting pathologist.
<b>Synonymous Names</b>	
<b>Notes</b>	Any additional information regarding the result that affects the clinician's interpretation.
<b>Datatype</b>	Text

### Usage

<b>Examples</b>	<p>Lymphocytosis – Suggest retesting in 1 month. If still elevated after 3 months and infectious causes have been excluded, lymphocyte immunophenotyping may be indicated.</p> <p>Would have been more useful to use test x in this case.</p>
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### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">RESULT DETAIL</a>	2.0	Optional		0..1

## 5.42 PERFORMING PATHOLOGIST

### Identification



<b>Name</b>	PERFORMING PATHOLOGIST
<b>Metadata Type</b>	Data Group
<b>Identifier</b>	DG-11009
<b>Version</b>	1.0

### Definition






<b>Definition</b>	Details of the pathologist and laboratory that were responsible for performing the result being reported on the pathology result report.
<b>Synonymous Names</b>	Healthcare Provider Individual
<b>Notes</b>	<p>Inclusion of this information enables recipients to follow up any questions that they may have in relation to the report.</p> <p>For full descriptions of the entire data hierarchy for a participant, including data element definitions and value domains, refer to the Participant Data Specification <a href="#">[DS-PART]</a>.</p>

### Relationships

#### *Parent*

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">RESULT DETAIL</a>	2.0	Essential		1

**Children**

Type	Name	Version	Obligation	Condition	Occ.
<b>T/T</b> <sub>010</sub>	Participation Type		Essential		1
<b>T/T</b> <sub>010</sub>	Healthcare Role		Essential		1
	ENTITY IDENTIFIER		Essential	<b>Must</b> contain an identifier which will enable the receiving system to identify the individual healthcare provider. <b>Should</b> include a Healthcare Provider Identifier – Individual (HPI-I) if available.	1..*
	ADDRESS		Desirable	<b>Should</b> contain an address For the reporting Pathologist	0..*
	ELECTRONIC COMMUNICATION DETAILS		Essential	<b>Must</b> contain an electronic delivery address; and <b>May</b> contain telephone contact details.	1..*
	PERSON NAME		Essential	<b>Must</b> contain name details.	1..*
	EMPLOYER ORGANISATION DETAILS		Essential	<b>Must</b> contain laboratory name.	1

## 5.43 Result Status

### Identification



<b>Name</b>	Result Status
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11029

### Definition


<b>Definition</b>	The status of the test result as indicated by the <a href="#">PERFORMING PATHOLOGIST</a> , detailing the stage at which the pathology testing has reached.
<b>Synonymous Names</b>	
<b>Notes</b>	<p>Allows a report with more than one result to be issued and for each result to have a different status associated with it.</p> <p>The status of a result is included within the report to inform the requester or receiver whether it is final or there is more to expect, or if amendments have been made. This indicates whether the results are able to be acted upon by the clinician.</p>
<b>Datatype</b>	CodeableText
<b>Value Domain</b>	HL7 v2.4 Table 0123

### Usage

<b>Examples</b>	<p>A – Some, but not all results available</p> <p>C – Correction to results</p> <p>F – Final results</p>
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### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">RESULT DETAIL</a>	2.0	Essential		1

## 5.44 DateTime Result Issued

### Identification



<b>Name</b>	DateTime Result Issued
<b>Metadata Type</b>	Data Element
<b>Identifier</b>	DE-11021

### Definition

<b>Definition</b>	The date or date and time that the result was issued for the current <a href="#">Result Status</a> .
<b>Synonymous Names</b>	
<b>Notes</b>	The date and time related to the <a href="#">Result Status</a> is useful for version control and cumulative results for the report.  The date a result is issued is required information.
<b>Datatype</b>	DateTime

### Usage

<b>Conditions of Use</b>	This data element should be completed with an exact date and time wherever possible. Where this is not possible, approximate and estimated dates that comply with <a href="#">[ISO 8601-2004]</a> are permitted.
<b>Misuse</b>	Entering approximate dates when an exact date is available.

### Relationships

#### Parent

Type	Name	Version	Obligation	Condition	Occ.
	<a href="#">RESULT DETAIL</a>	2.0	Essential		1



## 6 Sample Reports

Pathology reports may take several forms depending on the issuing laboratory or the receiving system. Pathology laboratories may issue reports that are department specific, that is, they will issue a separate Haematology and a separate Clinical Chemistry report on a request that asked for Full Blood Count and Electrolytes. Other pathology laboratories may issue these as one report. The structure of the content of the reports may also vary. Pathology laboratories may issue reports that give atomic results, textual results, or a combination of both, graphic results or even images. Haematology and Clinical Chemistry laboratories will in the main, issue results that give atomic results, possibly with some textual comment or interpretive notes. Microbiology laboratories will issue a mixture of atomic results and textual results, while Anatomical Pathology laboratories will in the main issue textual results.

The following samples illustrate how the Pathology Result Report Structured Document Template might be used to populate and display Pathology Result Report information.

### 6.1 Sample Report Header

#### **PATHOLOGY REPORT**

**NEHTA Pathology Pty Ltd** ABN 123 456 789

HPI-O: 34567890

Level 25 56 Pitt Street Sydney, NSW, 2000 Tel: (02) 1234 5678

REPORT TO:
HPI-O: 37890456 Dr Anne Doctor Good Health Medical Practice 101 Healthcare Drive Adelaide SA 5000

DOCUMENT CONTROL	
<b>Document Set Identifier</b>	BIOCH 08-9785441
<b>Version Number</b>	1
<b>Status</b>	Final
<b>Issue Date</b>	04/06/2008 1:15 pm

SUBJECT OF CARE			
<b>Name</b>	SMITH, John Michael		
<b>ID</b>	0952657 (RGH UR Number)		
<b>IHI</b>	987654321		
<b>Sex</b>	Male	<b>DOB</b>	9/10/1924 (81 years)

## 6.2 Sample 1

### INVESTIGATIONS

<b>REQUESTED TEST</b>	Glucose Tolerance Test		
<b>SPECIMEN</b>	Urine, Fasting		
<b>DateTime Issued</b>	04/06/2008 1:15 pm		
<b>Performing Pathologist</b>	Dr A Brown, NEHTA Lab		
<b>Lab Result ID</b>	BIOCH 08-9785441 : R1-1		
<b>Result Status</b>	Final		
<b>RESULTED TEST</b>	Glucose Tolerance Test		
<b>Result Observable Name</b>	<b>Value</b>	<b>Reference Range</b>	<b>Res. Obs. Status</b>
<b>Urine Glucose</b>	++		<b>F</b>
<b>Urine Ketone</b>	++		<b>F</b>

<b>REQUESTED TEST</b>	Glucose Tolerance Test		
<b>SPECIMEN</b>	Serum, Fasting		
<b>Result Status</b>	Final		
<b>RESULTED TEST</b>	Glucose Tolerance Test	<b>PATHOLOGIST</b>	Dr A Brown
<b>Result Observable Name</b>	<b>Value</b>	<b>Reference Range</b>	
<b>Serum Glucose</b>	<b>10.5 mmol/L</b>	<b>3.0-6.0</b>	

<b>REQUESTED TEST</b>	Glucose Tolerance Test		
<b>SPECIMEN</b>	Serum, 1 hour		
<b>Result Status</b>	Final		
<b>RESULTED TEST</b>	Glucose Tolerance Test	<b>PATHOLOGIST</b>	Dr A Brown
<b>Result Observable Name</b>	<b>Value</b>	<b>Reference Range</b>	
Serum Glucose	15.0 mmol/L		

<b>REQUESTED TEST</b>	Glucose Tolerance Test		
<b>SPECIMEN</b>	Serum, 2 hours		
<b>Result Status</b>	Final		
<b>RESULTED TEST</b>	Glucose Tolerance Test	<b>PATHOLOGIST</b>	Dr A Brown
<b>Result Observable Name</b>	<b>Value</b>	<b>Reference Range</b>	
<b>Serum Glucose</b>	<b>14.5 mmol/L</b>	<b>up to 7.7</b>	

#### EPISODE NOTE:

Marked impairment of glucose tolerance is present. These results are consistent with diabetes mellitus.

Oral glucose load:      Adult 75 g  
                                   Child 1.75 g/kg body weight (to a maximum of 75 g)

Interpretive criteria as recommended by the Working Party of RCPA, AACB and Aust Diab Soc (published in MJA, Vol 170, 19 April 1999)

Note that the layout shown above would be achieved by putting a standardised style sheet against the atomic information in the message. In many cases, pathology laboratories may wish to impose their own rendering, such as that shown in the figure below. Some messaging formats may allow this to occur, while others may not.

**GLUCOSE TOLERANCE TEST**

Oral glucose load: Adult 75 g

Child 1.75 g/kg body weight (to a maximum of 75 g)

Interpretive criteria as recommended by the Working Party of RCPA, AACB and Aust Diab Soc (published in MJA, Vol 170, 19 April 1999) &gt;&gt;

<u>Time</u>	<u>Serum Glucose</u>	<u>Ref Range</u>	<u>Urine Glucose</u>	<u>Urine Ketone</u>
Fasting:	10.5 mmol/L	(3.0 – 6.0)	++	++
1 Hour:	15.0 mmol/L			
2 Hour:	14.5 mmol/L	(up to 7.7)		

## Interpretation:

Marked impairment of glucose tolerance is present. These results are consistent with diabetes mellitus.

## 6.3 Sample 2

### INVESTIGATIONS

<b>REQUESTED TEST</b>	Microscopy, culture and sensitivities
<b>SPECIMEN</b>	Urine, Mid stream

#### RESULTED TEST 1

<b>Result Test Name</b>	Urinalysis	
<b>DateTime Issued</b>	10/11/2008 13:28	
<b>Performing Pathologist</b>	Dr J White, NEHTA Lab	
<b>Lab Result ID</b>	MICRO 08-9763274:R1	
<b>Result Status</b>	Final	
<b>Result Observable Name</b>	<b>Value</b>	<b>Status</b>
Protein	++	F
Glucose	++	F
Ketones	++	F

#### RESULTED TEST 2

<b>Result Test Name</b>	Microscopy			
<b>DateTime Issued</b>	10/11/2008 13:28			
<b>Performing Pathologist</b>	Dr J White, NEHTA Lab			
<b>Lab Result ID</b>	MICRO 08-9763274:R2			
<b>Result Status</b>	Final			
<b>Result Observable Name</b>	<b>Testing Method</b>	<b>Value</b>	<b>Ref Range</b>	<b>Status</b>
Leucocytes	Low power light microscopy	> 1000 x10 <sup>6</sup> /L	N.R. <10	F
Erthrocytes	Low power light microscopy	> 1000 x10 <sup>6</sup> /L	N.R. <10	F
Epithelial	Low power light microscopy	< 10 x10 <sup>6</sup> /L		F

#### RESULTED TEST 3

<b>Result Test Name</b>	Culture and Sensitivities	
<b>DateTime Issued</b>	10/11/2008 13:28	
<b>Performing Pathologist</b>	Dr J White, NEHTA Lab	
<b>Lab Result ID</b>	MICRO 08-9763274:R3	
<b>Result Status</b>	Final	
<b>Result Observable Name</b>	<b>Value</b>	<b>Status</b>
Org 1	Escherichia coli	F
Amoxicillin	R	F
Amoxicillin+Clavulanic acid	S	F
Cephalexin	S	F
Nitrofurantoin	S	F
Nurfloxacin	S	F
Trimethoprim	S	F
Co-trimoxazole	S	F
Gentamicin	S	F

## 6.4 Sample 3

### MICROBIAL SEROLOGY

<b>REQUESTED TEST</b>	Strongyloides Antibody Level											
<b>SPECIMEN</b>	Serum											
<b>RESULTED TEST</b>	As above											
<b>Performing Pathologist</b>	Dr K Grey, NEHTA Lab											
<b>Lab Result ID</b>	IMMUN 08-7843589											
<b>DateTime Issued</b>	04/06/2008 08:30 am											
<b>Result Status</b>	Final											
Result Observable Name	Testing Method	Value	Abnormal Result Indicator	Status								
Strongyloides IgH	Enzyme immunoassay method (EIA)	1.2	Borderline	F								
<b>Result Note</b>												
Possible low-responding infection but may be non-specific reaction. If symptoms persist, suggest repeat serological testing and examination of stools (including agar plate method).												
<b>Clinical Guideline Note</b>												
The sensitivity and specificity of this assay are reported to be >85%. Sera from people from endemic areas of the world may show higher background reactivity.												
<table> <thead> <tr> <th>RATIO (Patient: Cut-off)</th> <th>INTERPRETATION</th> </tr> </thead> <tbody> <tr> <td>&lt;0.9</td> <td>Negative</td> </tr> <tr> <td>0.9 – 1.2</td> <td>Equivocal</td> </tr> <tr> <td>&gt;1.2</td> <td>Positive</td> </tr> </tbody> </table>					RATIO (Patient: Cut-off)	INTERPRETATION	<0.9	Negative	0.9 – 1.2	Equivocal	>1.2	Positive
RATIO (Patient: Cut-off)	INTERPRETATION											
<0.9	Negative											
0.9 – 1.2	Equivocal											
>1.2	Positive											
Please note: IMMUNOSUPPRESSION MAY PRECIPITATE FATAL DISSEMINATED STRONGLOIDAISIS.												

<b>REQUESTED TESTS</b>	Blood Culture, ANA, HBSAB		
<b>RESULTED TESTS</b>	TBA	<b>Result Status</b>	Pending

## 6.5 Sample 4

### INVESTIGATIONS

<b>REQUESTED TEST</b>	Histopathology Test
<b>SPECIMEN</b>	Skin, Right Forearm
<b>Result Test Name</b>	Histopathology Test
<b>DateTime Issued</b>	10/11/2008 15:47
<b>Performing Pathologist</b>	Dr K Maroon, NEHTA Lab
<b>Lab Result ID</b>	BRI 08-9007865
<b>Result Status</b>	Final
Result Observable Name	Value
Macroscopic	The specimen consists of an ovoid shaped piece of skin measuring 41x40x5mm bearing a pale centrally ulcerated and crusted les margin (12 o'clock) . There is a marking staple attached at one end. With the staple placed at 12 o'clock, the 6 o'clock margin is inked black. 1TS bisected in each, Blocks B – E. 1TS, Block F. 1TS, 2TS to 9 o'clock Block G.
Microscopic	The sections show moderately differentiated SQUAMOUS CELL CARCINOMA invading deep dermis. There is no perineural permeation or lym.
Interpretive Note	
SQUAMOUS CELL CARCINOMA. EXCISION APPEARS COMPLETE	

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# 8 Index

## A

Attestation ..... 5

## C

CIS .....*See* Clinical Information System

Clinical Guideline Note ..... 69

Clinical Information System ..... 9

Clinical Reason for Request..... 25, 37, 40

Collection Date/Time..... 54

## D

DateTime Requested..... 31

DateTime Result Issued ..... 79

DateTime Specimen Collected..... 54

DateTime Specimen Received..... 56

Document Author ..... 22

Document Authoriser/Approver ..... 23

DOCUMENT AUTHORISER/APPROVER  
..... 18

Document Control..... 22

Document Map ..... 3

Document Recipients ..... 23

## E

EHR ..... 2

Episode Note..... 30

Event ..... 17

## F

Facility Detail ..... 20

## H

Header..... 17

HEALTH EVENT CONTEXT ..... 17

## I

Intended Audience ..... 2

Interpretive Note ..... 30, 75

## L

Laboratory Information System ..... 9

Laboratory Request Identifier ..... 45, 61

Laboratory Result Identifier..... 62

LIS .....*See* Laboratory Information System

Logical Record Architecture..... 1

## O

Out Of Range Indicator..... 73

## P

PARTICIPATION ..... 18

PARTICIPATION ..... 17

PARTICIPATION.PERSON ..... 18

PATHOLOGY EPISODE..... 27

Pathology Order..... 37

Pathology Report ..... 2

PATHOLOGY REPORT COPY TO ..... 34

Pathology Report To ..... 23

Pathology Result Report Detail..... 25

PATHOLOGY TEST REQUESTER..... 32

PERFORMING PATHOLOGIST ..... 76

Priority ..... 38

Purpose and Scope ..... 1

## R

Reference Interval..... 68

Related Problem or Diagnosis..... 42

Report..... 29

Reporting Pathologist..... 22

REQUEST DETAIL ..... 36, 37

Request Status ..... 39

Request Test Name ..... 46

Requester Order Identifier ..... 44

RESULT DETAIL..... 59

Result Note ..... 71

Result Observable Name..... 65

Result Observable Reference Range..... 68

RESULT OBSERVABLE REFERENCE

RANGE..... 67

Result Observable Status ..... 74

Result Observable Value..... 66

Result Status ..... 78

Result Test Name ..... 63

## S

Sample Biochemistry Results ..... 82

Sample Immunology Result..... 85, 86

Sample Microbiology Results ..... 84

Sample Report Header ..... 81

Specimen Anatomical Site ..... 52

Specimen Characteristic..... 57

Specimen Collection Setting..... 25, 48, 55

SPECIMEN DETAIL ..... 47

Specimen Identifier ..... 53

Specimen Qualifier ..... 51

Specimen Quality..... 58

Specimen Type..... 49

Structured Document Template ..... 1, 4

STRUCTURED RESULT ENTRY ..... 64

Subject of Care..... 5, 18

## T

Testing Method ..... 70

## U

Unexpected Result Indicator ..... 72

Use Case – Amend Result..... 13

Use Case – Create Result ..... 12

Use Case – Receive Result..... 14

Use Case Actors..... 9

Use Cases..... 7