



**eHealth Pathology Report
Information Requirements v1.1**

31 December 2014

Approved for external use

Document ID: NEHTA-1884:2014

National E-Health Transition Authority Ltd

Level 25
56 Pitt Street
Sydney, NSW 2000
Australia
www.nehta.gov.au

Disclaimer

The National E-Health Transition Authority Ltd (NEHTA) makes the information and other material ('Information') in this document available in good faith but without any representation or warranty as to its accuracy or completeness. NEHTA cannot accept any responsibility for the consequences of any use of the Information. As the Information is of a general nature only, it is up to any person using or relying on the Information to ensure that it is accurate, complete and suitable for the circumstances of its use.

Document control

This document is maintained in electronic form and is uncontrolled in printed form. It is the responsibility of the user to verify that this copy is the latest revision.

Copyright © 2014 National E-Health Transition Authority Ltd

This document contains information which is protected by copyright. All Rights Reserved. No part of this work may be reproduced or used in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, or information storage and retrieval systems—without the permission of NEHTA. All copies of this document must include the copyright and other information contained on this page.

Acknowledgement

The National E-Health Transition Authority is jointly funded by the Australian Government and all State and Territory Governments.

Document information

Key information

Owner Head of Product Delivery

Contact for enquiries NEHTA Help Centre
t: 1300 901 001
e: help@nehta.gov.au

Product version history

Product version	Date	Release comments
1.0	9 September 2014	Limited release
1.1	31 December 2014	Initial public release

Table of contents

1	Introduction	5
1.1	Purpose.....	5
1.2	Intended audience	5
1.3	Overview	6
1.4	Scope.....	6
1.5	User interface and format	6
1.6	Assumptions	6
2	Individual - Subject of Care	8
2.1	Individual (core).....	8
2.2	Individual (extension)	10
3	Healthcare Provider - Pathology Test Requester	12
3.1	Non-PCEHR participating Healthcare Provider (core).....	13
4	Healthcare Provider - Pathologist.....	15
4.1	PCEHR participating Healthcare Provider (core)	17
5	CDA Document Author	19
5.1	PCEHR participating Healthcare Provider (core)	20
5.2	Healthcare Provider (extension).....	22
6	Document control (core)	23
7	Domain Specific - Pathology	25
8	Entity relationship diagram	30
9	Sample	31
10	Pathology report scenarios.....	32
11	Known issues.....	33
	Acronyms	34
	Glossary	35

1 Introduction

1.1 Purpose

This document presents the information requirements regarding the clinical document artefact resulting from the eHealth Pathology Report capability in the personally controlled electronic health record (PCEHR).

These information requirements are a logical set of data items for exchange and are therefore independent of any particular platform, technology, exchange format, or presentation format.

The primary purpose of this document is to provide detailed information requirements for the Pathology Report clinical document which can be uploaded to an individual's PCEHR. This document informs the technical specifications for the Pathology Report clinical document.

Further, this document defines the requirements for a nationally agreed exchange of information between healthcare providers and the PCEHR infrastructure in Australia, independent of exchange or presentation format.

It is anticipated that these will:

- promote a common understanding of the requirements for the purposes of constructing and consuming these records;
- provide a common framework for the development and use of semantically interoperable information components to be exchanged between applications, providers, and jurisdictions;
- provide a common framework for defining queries using these information requirements at a logical level, which may be adopted for implementations in local, jurisdictional, or national electronic health record environments;
- provide a common framework upon which to define nationally agreed, specialty-specific information requirements; and
- provide a common framework for nationally defined mappings to specific exchange formats (i.e. mappings to XML payloads or streams).

1.2 Intended audience

This document is intended for all interested stakeholders including:

- clinicians;
- early-adopter hospitals and health departments in the process of planning, implementing or upgrading eHealth systems;
- software vendors developing eHealth system products;
- senior managers and policy makers, clinical experts, health information managers, IT operations and support teams, system integrators;
- consumers and consumer representatives; and
- the Commonwealth Department of Health project team.

1.3 Overview

These information requirements define the structure of the Pathology Report clinical document. This clinical document is intended to be sent to and stored in the PCEHR system, viewed through the PCEHR portals, and available as a clinical document for download from the PCEHR for viewing in the local system.

These information requirements relate to the Pathology Report clinical document, as distinct from a pathology report that is communicated point-to-point between an authoring pathology provider and a requesting healthcare provider.

The information presented here is defined at the logical level, and is therefore independent of specific exchange or presentation formats.

1.4 Scope

The scope of the eHealth Pathology Report capability is to describe information solely related to the individual's pathology test.

As these are information requirements relating to the clinical document, this requirements document does not describe any function present in, or required of, either consumer or provider portals.

1.5 User interface and format

The requirement that a particular piece of data is exchanged in a Pathology Report clinical document does not imply a requirement on the user interface. Some data elements – for example, 'Healthcare Provider's (Author) Organisation identifier' – are intended purely for purposes of internal processes within the receiving system. Other data elements (e.g. 'Date of Birth') have a number of different presentation options available (e.g. 'Birth Day' + 'Year of Birth').

The names given to data components and data elements do not imply that these must be used as data element labels on a user interface. Implementations that modify the data element names to accommodate local practices (e.g. 'Person name' represented as 'Patient Name') will still conform to this specification, but only if the meaning of the data is not modified.

The order in which the data elements are listed in this document is not indicative of the order in which this data will be exchanged or presented to the user.

1.6 Assumptions

- The solution design is based on the HL7 Clinical Document Architecture (CDA) standard, and others as relevant (e.g. CDA Document Author, and Template Identifier).
- All address and communication information related to healthcare providers is assumed to relate to the provider workplace, and not to the personal information of any staff members.
- References to 'report' mean the clinical information that is sent from the service provider to the requester (i.e. the results, including any empirical data, plus any interpretation provided).
- References to any 'PDF document' or 'PDF attachment' mean the electronic representation – in PDF format – of the clinical information that is returned

to the requester. It is assumed that the PDF document content matches that of its associated report.

- References to 'the document' refer to the CDA document; the artefact to which these information requirements apply.

2 Individual - Subject of Care

The individual is the person about whom the health information has been captured; the subject of care on the pathology report.

2.1 Individual (core)

Data item	Req No.	Requirement statement	Rationale	Present in view payload
Individual Healthcare Identifier (mandatory)	022082	The document SHALL contain the individual's Individual Healthcare Identifier (IHI).	<p>Enables interoperability. Eliminates ambiguity. Supports the indexing of clinical documents.</p> <p>If an IHI is not available then the individual's PCEHR cannot be identified.</p> <p>Traces Bus Req # 024623. R5-PATH-004a</p>	Yes
Individual's Title (optional)	022081	The document SHOULD contain at least one title for the individual.	<p>Titles such as 'Mrs', 'Mr', 'Dr' etc. are useful when communicating with the individual.</p> <p>Traces Bus Req # 024623. R5-PATH-004a</p>	Yes
Individual's Given Name (optional)	023056	The document SHOULD contain at least one given name for the individual.	<p>To enable consistent and correct identification of the individual's document. Assists in verifying that the document relates to the individual.</p> <p>Traces Bus Req # 024623. R5-PATH-004a</p>	Yes

Data item	Req No.	Requirement statement	Rationale	Present in view payload
Individual's Family Name (mandatory)	023058	The document SHALL contain the individual's family name.	To enable consistent and correct identification of the individual. This is a required field when validating IHIs against the Healthcare Identifiers (HI) Service. Traces Bus Req # 024623. R5-PATH-004a	Yes
Individual's Name Suffix (optional)	023059	The document SHOULD contain the individual's name suffix where applicable.	Suffixes such as 'Snr', 'Jnr' etc. can be a useful aid in the correct and unique identification of the individual. Traces Bus Req # 024623. R5-PATH-004a	
Individual's Sex (mandatory)	024032	The document SHALL contain the individual's sex.	To enable consistent and correct identification of the individual. This is a required field when validating IHIs against the HI Service. The individual's sex is also useful in clinical decision making. Traces Bus Req # 024623. R5-PATH-004a	Yes
Individual's Date of Birth (mandatory)	023060	The document SHALL contain the individual's date of birth.	To enable consistent and correct identification of the individual. This is a required field when validating IHIs against the HI Service. Date of birth is also useful in clinical decision making. Traces Bus Req # 024623. R5-PATH-004a	Yes

Data item	Req No.	Requirement statement	Rationale	Present in view payload
Date of Birth accuracy indicator (optional)	024026	The document SHOULD contain a date of birth accuracy indicator.	<p>To assist in the correct identification of the individual.</p> <p>It is important for clinicians to know when a provided date of birth is an approximation to assist in clinical decision making.</p> <p>Traces</p> <p>Bus Req # 024623. R5-PATH-004a</p>	

2.2 Individual (extension)

Data item	Req No.	Requirement statement	Rationale	Present in view payload
Individual's Address (mandatory)	024041	The document SHALL contain at least one address for the individual.	<p>To enable consistent and correct identification of the individual.</p> <p>Traces</p> <p>Bus Req # 024623. R5-PATH-004a</p>	Yes
Individual's Electronic Communication Details (optional)	024042	The document SHOULD contain at least one set of electronic communication details for the individual. These include (but are not limited to) telephone number, mobile phone number, email address etc.	<p>To enable electronic communication with the individual.</p> <p>Traces</p> <p>Bus Req # 024623. R5-PATH-004a</p>	

Data item	Req No.	Requirement statement	Rationale	Present in view payload
Indigenous Status (mandatory)	024033	The document SHALL state whether a person identifies as being of Aboriginal and/or Torres Strait Islander origin, or give a clear indication that their Indigenous status was not stated.	Members of the Indigenous community may have specific health needs and be eligible for a range of specific services. Access to this information may contribute to improved Indigenous health. Traces Bus Req # 024623. R5-PATH-004a	

3 Healthcare Provider - Pathology Test Requester

The particular provider who requests one or more pathology tests for a subject of care is known as the pathology test requester.

The modelling used in this section assumes a non-PCEHR participant, meaning that the test requester need not participate in the PCEHR, nor require an HPI-O/HPI-I (i.e. they need not be in the HI Service). This is neither a constraint nor a requirement, but a recognition that a test requester need not have, or even know, their HPI-O/HPI-I. In many cases, the requester will be a participant and their HPI-O/HPI-I will be known to them. As always, providers are encouraged to provide as much metadata as possible when generating CDA documents.

It is assumed that a given pathology report is generated in response to a single request (i.e. a report will have one and only one requester). This implies that requests are not collated from the same referrer, or different referrers, before tests are performed, but are processed as individual cases. The single request will contain one or more test requests (i.e. orders).

Data item	Req No.	Requirement statement	Rationale	Present in view payload
Healthcare Provider Organisation Name (optional)	024603	The document SHOULD contain the name of the organisation the healthcare provider is representing at the time of the CDA document's creation.	To enable consistent and correct identification of the healthcare provider organisation. This is a required field when validating HPI-Os against the HI Service.	Yes

3.1 Non-PCEHR participating Healthcare Provider (core)

Data item	Req No.	Requirement statement	Rationale	Present in view payload
Healthcare Provider Identifier-Individual (optional)	024601	The document SHOULD contain the Healthcare Provider Individual Identifier (HPI-I).	To enable consistent and correct identification of the healthcare provider. Traces Bus Req # 024624. R5-PATH-004b	
Healthcare Provider Identifier-Organisation (optional)	024602	The document SHOULD contain the Healthcare Provider Identifier-Organisation (HPI-O) of the organisation the healthcare provider is representing at the time of the CDA document creation.	To enable consistent and correct identification of the organisation or practice that the healthcare provider is representing at the time of document creation. Traces Bus Req # 024624. R5-PATH-004b	
Healthcare Provider's Title (optional)	023061	The document SHOULD contain at least one title for the healthcare provider.	Titles such as 'Mrs', 'Mr', 'Dr' etc. are useful when communicating with the healthcare provider. Traces Bus Req # 024624. R5-PATH-004b Bus Req # 024626. R5-PATH-004e Bus Req # 023285. R5-PATH-002	
Healthcare Provider Given Name (optional)	023062	The document SHOULD contain at least one given name for the healthcare provider.	To enable consistent and correct identification of the healthcare provider. Traces Bus Req # 024624. R5-PATH-004b Bus Req # 024626. R5-PATH-004e Bus Req # 023285. R5-PATH-002	Yes

Data item	Req No.	Requirement statement	Rationale	Present in view payload
Healthcare Provider Family Name (mandatory)	023064	The document SHALL contain the healthcare provider's family name.	<p>To enable consistent and correct identification of the healthcare provider. This is a required field when validating HPI-Is against the HI Service.</p> <p>Traces</p> <p>Bus Req # 024624. R5-PATH-004b Bus Req # 024626. R5-PATH-004e Bus Req # 023285. R5-PATH-002</p>	Yes
Healthcare Provider Name Suffix (optional)	023065	The document SHOULD contain the healthcare provider's name suffix where applicable.	<p>To enable consistent and correct identification of the healthcare provider.</p> <p>Suffixes such as 'Snr', 'Jnr' etc. can be a useful aid in the correct and unique identification of the Healthcare Provider.</p> <p>Traces</p> <p>Bus Req # 024624. R5-PATH-004b Bus Req # 024626. R5-PATH-004e Bus Req # 023285. R5-PATH-002</p>	

4 Healthcare Provider - Pathologist

The person who approves the release of the report is called the pathologist.

Data item	Req No.	Requirement statement	Rationale	Present in view payload
Healthcare Provider Individual's Workplace Address (mandatory)	022061	<p>The document SHALL contain the healthcare provider individual's Australian workplace address.</p> <p>Additional Notes</p> <p>A healthcare provider may work for more than one organisation. The address is for the organisation the healthcare provider is representing at that point in time.</p>	<p>To enable consistent and correct identification of the healthcare provider.</p> <p>Traces</p> <p>Bus Req # 024626. R5-PATH-004e Bus Req # 023285. R5-PATH-002</p>	
Healthcare Provider Individual's Workplace Communication Details (mandatory)	022058	<p>The document SHALL contain at least one set of communication details for the workplace of the individual. These include (but are not limited to) telephone numbers, mobile phone numbers, email addresses etc.</p> <p>Additional Notes</p> <p>A healthcare provider may work for more than one organisation. The communication details are for the organisation the healthcare provider is representing at that point in time. These are the workplace communication details of the individual - not the organisation.</p>	<p>To enable electronic communication with the healthcare provider.</p> <p>Traces</p> <p>Bus Req # 024626. R5-PATH-004e Bus Req # 023285. R5-PATH-002</p>	

Data item	Req No.	Requirement statement	Rationale	Present in view payload
Healthcare Provider Organisation Name (mandatory)	023070	The document SHALL contain the name of the organisation the healthcare provider is representing at the time of CDA document creation.	<p>To enable consistent and correct identification of the healthcare provider organisation. This is a required field when validating HPI-Os against the HI Service.</p> <p>Traces</p> <p>Bus Req # 024624. R5-PATH-004b Bus Req # 024626. R5-PATH-004e Bus Req # 023285. R5-PATH-002</p>	Yes

4.1 PCEHR participating Healthcare Provider (core)

Data item	Req No.	Requirement statement	Rationale	Present in view payload
Healthcare Provider Identifier-Individual (mandatory)	023066	The document SHALL contain the Healthcare Provider's Individual Identifier (HPI-I).	To enable consistent and correct identification of the healthcare provider. Traces Bus Req # 024626. R5-PATH-004e Bus Req # 023285. R5-PATH-002	Yes
Healthcare Provider Identifier-Organisation (mandatory)	023071	The document SHALL contain the Healthcare Provider Identifier-Organisation (HPI-O) of the organisation the healthcare provider is representing at the time of the CDA document creation.	To enable consistent and correct identification of the organisation or practice that the healthcare provider is representing at the time of document creation. Traces Bus Req # 023285. R5-PATH-002 Bus Req # 024626. R5-PATH-004e	Yes
Healthcare Provider's Title (optional)	023061	The document SHOULD contain at least one title for the healthcare provider.	Titles such as 'Mrs', 'Mr', 'Dr' etc. are useful when communicating with the healthcare provider. Traces Bus Req # 024624. R5-PATH-004b Bus Req # 024626. R5-PATH-004e Bus Req # 023285. R5-PATH-002	

Data item	Req No.	Requirement statement	Rationale	Present in view payload
Healthcare Provider Given Name (optional)	023062	The document SHOULD contain at least one given name for the healthcare provider.	<p>To enable consistent and correct identification of the healthcare provider.</p> <p>Traces</p> <p>Bus Req # 024624. R5-PATH-004b Bus Req # 024626. R5-PATH-004e Bus Req # 023285. R5-PATH-002</p>	Yes
Healthcare Provider Family Name (mandatory)	023064	The document SHALL contain the healthcare provider's family name.	<p>To enable consistent and correct identification of the healthcare provider. This is a required field when validating HPI-Is against the HI Service.</p> <p>Traces</p> <p>Bus Req # 024624. R5-PATH-004b Bus Req # 024626. R5-PATH-004e Bus Req # 023285. R5-PATH-002</p>	Yes
Healthcare Provider Name Suffix (optional)	023065	The document SHOULD contain the healthcare provider's name suffix where applicable.	<p>To enable consistent and correct identification of the healthcare provider.</p> <p>Suffixes such as 'Snr', 'Jnr' etc. can be a useful aid in the correct and unique identification of the Healthcare Provider.</p> <p>Traces</p> <p>Bus Req # 024624. R5-PATH-004b Bus Req # 024626. R5-PATH-004e Bus Req # 023285. R5-PATH-002</p>	

5 CDA Document Author

The CDA Document Author is the individual responsible for the creation and packaging of the CDA document. The CDA document may or may not be uploaded to the PCEHR by the CDA Document Author.

Data item	Req No.	Requirement statement	Rationale	Present in view payload
Healthcare Provider Organisation Name (mandatory)	023070	The document SHALL contain the name of the organisation the healthcare provider is representing at the time of CDA document creation.	To enable consistent and correct identification of the healthcare provider organisation. This is a required field when validating HPI-Os against the HI Service. Traces Bus Req # 024624. R5-PATH-004b Bus Req # 024626. R5-PATH-004e Bus Req # 023285. R5-PATH-002	Yes
Healthcare Provider Professional Role (mandatory)	024040	The document SHALL contain the healthcare provider's professional role (e.g. General Practitioner). This data item MAY carry a value equivalent to 'unknown'.	Describing the professional role a healthcare provider is acting in the provision of healthcare can provide context and assist in interactions between healthcare providers to the benefit of individuals receiving healthcare. Traces Bus Req # 023285. R5-PATH-002	Yes

5.1 PCEHR participating Healthcare Provider (core)

Data item	Req No.	Requirement statement	Rationale	Present in view payload
Healthcare Provider Identifier-Individual (mandatory)	023066	The document SHALL contain the Healthcare Provider's Individual Identifier (HPI-I).	To enable consistent and correct identification of the healthcare provider. Traces Bus Req # 024626. R5-PATH-004e Bus Req # 023285. R5-PATH-002	Yes
Healthcare Provider Identifier-Organisation (mandatory)	023071	The document SHALL contain the Healthcare Provider Identifier-Organisation (HPI-O) of the organisation the healthcare provider is representing at the time of the CDA document creation.	To enable consistent and correct identification of the organisation or practice that the healthcare provider is representing at the time of document creation. Traces Bus Req # 023285. R5-PATH-002 Bus Req # 024626. R5-PATH-004e	Yes
Healthcare Provider's Title (optional)	023061	The document SHOULD contain at least one title for the healthcare provider.	Titles such as 'Mrs', 'Mr', 'Dr' etc. are useful when communicating with the healthcare provider. Traces Bus Req # 024624. R5-PATH-004b Bus Req # 024626. R5-PATH-004e Bus Req # 023285. R5-PATH-002	

Data item	Req No.	Requirement statement	Rationale	Present in view payload
Healthcare Provider Given Name (optional)	023062	The document SHOULD contain at least one given name for the healthcare provider.	<p>To enable consistent and correct identification of the healthcare provider.</p> <p>Traces</p> <p>Bus Req # 024624. R5-PATH-004b Bus Req # 024626. R5-PATH-004e Bus Req # 023285. R5-PATH-002</p>	Yes
Healthcare Provider Family Name (mandatory)	023064	The document SHALL contain the healthcare provider's family name.	<p>To enable consistent and correct identification of the healthcare provider. This is a required field when validating HPI-Is against the HI Service.</p> <p>Traces</p> <p>Bus Req # 024624. R5-PATH-004b Bus Req # 024626. R5-PATH-004e Bus Req # 023285. R5-PATH-002</p>	Yes
Healthcare Provider Name Suffix (optional)	023065	The document SHOULD contain the healthcare provider's name suffix where applicable.	<p>To enable consistent and correct identification of the healthcare provider.</p> <p>Suffixes such as 'Snr', 'Jnr' etc. can be a useful aid in the correct and unique identification of the healthcare provider.</p> <p>Traces</p> <p>Bus Req # 024624. R5-PATH-004b Bus Req # 024626. R5-PATH-004e Bus Req # 023285. R5-PATH-002</p>	

5.2 Healthcare Provider (extension)

Data item	Req No.	Requirement statement	Rationale	Present in view payload
Healthcare Provider Individual's Workplace Address (optional)	024035	The document SHOULD contain the Healthcare Provider Individual's Australian workplace address.	To enable consistent and correct identification of the healthcare provider.	
Healthcare Provider Individual's Workplace Electronic Communication Details (optional)	024036	<p>The document SHOULD contain at least one set of electronic communication details for the workplace of the individual. These include (but are not limited to) telephone numbers, mobile phone numbers, email addresses etc.</p> <p>Additional Notes</p> <p>A healthcare provider may work for more than one organisation. The communication details are for the organisation the healthcare provider is representing at that point in time. These are the workplace communication details of the individual - not the organisation.</p>	To enable electronic communication with the healthcare provider.	

6 Document control (core)

Data item	Req No.	Requirement statement	Rationale	Present in view payload
Document Version Number (mandatory)	023068	<p>The document SHALL contain the document version number.</p> <p>Additional Notes</p> <p>This is the CDA document version number that is recognised by the PCEHR.</p>	<p>The version number differentiates each instance of a document from its predecessors and successors.</p> <p>Traces</p> <p>Bus Req # 023285. R5-PATH-002</p>	
Document Instance Identifier (mandatory)	023067	<p>The document SHALL contain a globally unique identifier for each document instance.</p>	<p>Required to uniquely identify a document instance.</p> <p>Traces</p> <p>Bus Req # 023285. R5-PATH-002</p>	Yes
Template identifier (mandatory)	023069	<p>The document SHALL contain at least one identifier of a template that the document conforms to.</p>	<p>The template identifiers identify the specific templates the CDA document conforms to.</p> <p>These identifiers may be used by systems to validate the document.</p> <p>Traces</p> <p>Bus Req # 023285. R5-PATH-002</p>	
Date and time of document creation (mandatory)	024025	<p>The document SHALL contain the date and time the CDA document instance was generated.</p>	<p>The date and time a document was created enables effective document provenance and management.</p> <p>Traces</p> <p>Bus Req # 023285. R5-PATH-002</p>	Yes

Data item	Req No.	Requirement statement	Rationale	Present in view payload
Document type (mandatory)	024027	The document SHALL contain a unique identifier that specifies the document type.	<p>The identification of the document type (e.g. a unique identifier referencing 'Discharge Summary') may be of value in categorising the various document types for display in the PCEHR portals, Views, and clinical information systems.</p> <p>Traces</p> <p>Bus Req # 023285. R5-PATH-002</p>	Yes

7 Domain Specific - Pathology

This section deals with requirements regarding the actual content of the pathology result returned by the pathology laboratory to the requesting healthcare provider.

Data item	Req No.	Requirement statement	Rationale	Present in view payload
Request Date/Time (mandatory)	024364	<p>The document SHALL contain the date and time (where time is available) of the pathology request.</p> <p>If multiple test results relate to a single request then those test results SHALL have the same request date/time value.</p>	<p>This provides a point-in-time reference within the eHealth record that the clinician may refer to, and may offer a point-in-time reference for associating the request data to the result data.</p> <p>Traces Bus Req # 024624. R5-PATH-004b</p>	Yes
Request Identifier (optional)	024029	<p>The document SHOULD contain the request ID the pathology report relates to.</p> <p>Additional Notes This is the request ID optionally provided by the requesting healthcare provider.</p>	<p>Including the request ID assists in quick document retrieval, auditing, and document management activities.</p> <p>Traces Bus Req # 024624. R5-PATH-004b</p>	Yes
Report Identifier (mandatory)	024030	<p>The document SHALL contain the same report ID as that displayed in the pathology report.</p>	<p>Storing the report ID assists in quick document retrieval and ensuring the attached PDF is correct for the CDA document.</p> <p>Traces Bus Req # 024625. R5-PATH-004c</p>	Yes

Data item	Req No.	Requirement statement	Rationale	Present in view payload
Report date/time (mandatory)	024367	The document SHALL include the date and time the pathology report was created.	<p>Metadata required in order to support the provision of a usable and clinically safe view of pathology reports in the PCEHR system.</p> <p>Traces Bus Req # 024625. R5-PATH-004c</p>	Yes
Report status (mandatory)	024366	The document SHALL record the report status associated with the attached report. There SHALL be at most one report status and the status SHALL be coded using a value from the HL7 2.x 0123 Result Status table.	<p>To inform the requester or receiver of the report whether a report is final, or there is more to expect, or if amendments have been made. This provides relevant status information for the clinician to decide if the report can be acted upon.</p> <p>Traces Bus Req # 024625. R5-PATH-004c</p>	Yes
Report name (mandatory)	024365	The document SHALL contain a descriptive name.	<p>Provides a summary that relates to the current document.</p> <p>Traces Bus Req # 024625. R5-PATH-004c</p>	Yes
Authorisation date/time (internally authorised) (mandatory)	024046	The document SHALL contain the date and time (time where available) the report was internally approved for release to external agencies/organisations.	<p>Understanding when a document was approved for release may hold clinical relevance.</p> <p>Traces Bus Req # 024625. R5-PATH-004c</p>	Yes

Data item	Req No.	Requirement statement	Rationale	Present in view payload
Single PDF attachment (mandatory)	024372	The document SHALL contain a single pathology report as an attachment in PDF format.	Pathology reports will only be made available in the PCEHR system in a PDF format to ensure that the presentation and rendering of the data is as expected by the authoring pathologist. This is important until adequate standardisation across the industry permits results to be provided atomically.	
Pathology Discipline (mandatory)	024368	The document SHALL contain the pathology discipline associated with each test result (e.g. Haematology).	Being able to view key metadata associated with each test result detailed in an eHealth pathology report supports the provision of a usable and clinically safe view of pathology reports in the PCEHR. Traces Bus Req # 024627. R5-PATH-004d	Yes

Data item	Req No.	Requirement statement	Rationale	Present in view payload
Test Name (mandatory)	024369	<p>The document SHALL contain the test name for each individual test. The test name may carry a null flavor.</p> <p>Additional Notes</p> <p>The test name may represent an individual test (e.g. INR, Digoxin) or it may represent a common test panel (e.g. FBC, LFT).</p> <p>Some tests may not be allocated a name, the name may carry an arbitrary test identification number, or the test name may be suppressed in a given CDA document. Where the intention is to exclude the test name from the CDA document the author must be able to leave the name absent or otherwise indicate that the test name is not provided.</p>	<p>Being able to view key metadata associated with each test result detailed in an eHealth pathology report supports the provision of a usable and clinically safe view of pathology reports in the PCEHR.</p> <p>Traces</p> <p>Bus Req # 024627. R5-PATH-004d</p>	Yes
Test status (optional)	024370	<p>The document SHOULD record the test status associated with each test.</p> <p>If a test status is provided, there SHALL be at most one test status for each test and it SHALL be coded using a value from the HL7 2.x 0123 Result Status table.</p>	<p>Being able to view key metadata associated with each test result detailed in an eHealth pathology report supports the provision of a usable and clinically safe view of pathology reports in the PCEHR.</p> <p>Traces</p> <p>Bus Req # 024627. R5-PATH-004d</p>	Yes

Data item	Req No.	Requirement statement	Rationale	Present in view payload
Specimen Collected Date/Time (mandatory)	024371	The document SHALL include the date and time (time where available) when the first sample collection has taken place for each test. There SHALL be one date and time (time where available) for each sample collection that has been ordered.	Being able to view key metadata associated with each test result detailed in an eHealth pathology report supports the provision of a usable and clinically safe view of pathology reports in the PCEHR. Traces Bus Req # 024627. R5-PATH-004d	Yes

8 Entity relationship diagram

This diagram is included to show the identified information components and the cardinality of them.

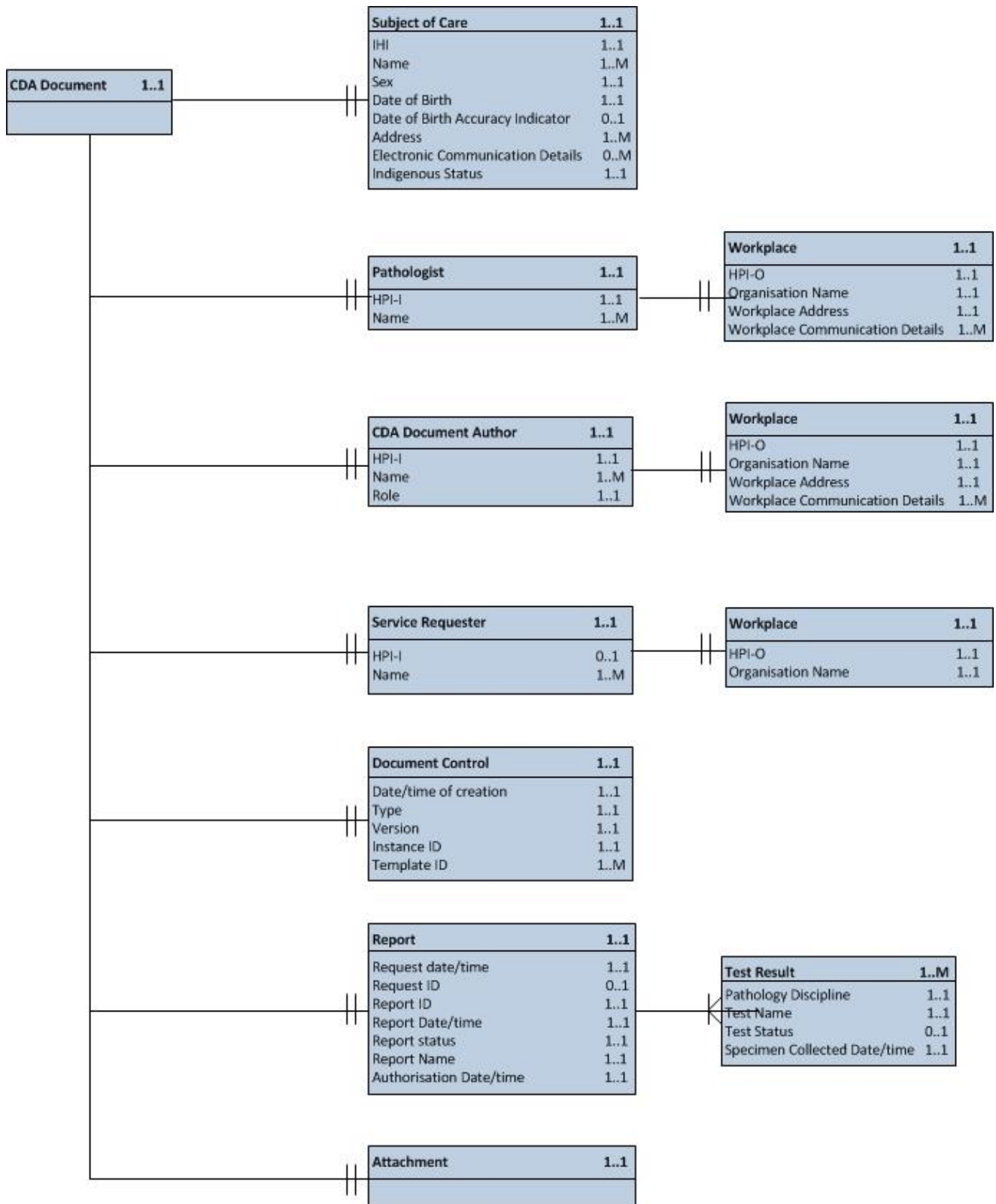


Figure 1: Pathology Entity relationship

9 Sample

The example below represents a conceptual view of the information requirements contained in this document. This is intended to be an example only, to assist with understanding and review, and is not intended to be incorporated into any implementation design or technical specification.

Pathology Report			
Brown, Robert	DOB 21-Jan-1952 (62y*)	Sex Male	IHI 8003 6002 0000 2220
<small>Start of document</small>			
Patient		Document Author (Uploading Healthcare Provider)	
Name:	Brown, Robert	Organisation:	DMH
Sex:	Male	HPI-O:	8003 6286 2341 6000
Date of Birth:	21-Jan-1952	Document author:	Dr. Patricia DeTullo
IHI:	8003 6002 0000 2220	HPI-I:	8003 6145 8457 7000
Other:	444 222 bbb 123	Role:	Haematologist
Address:	22 Ferris Way, Parramatta, NSW 2150	Address:	75 Burns Rd, Lane Cove, NSW 2066
Phone:	02 9999 4422	Phone:	02 4569 1246
Email:	bobbybrown@gamil.com	Mobile:	0412 333 788
Indigenous Status:	Aboriginal	Email:	admin_lane Cove@dmh.com.au
Document type:	Pathology Report	Document version:	1
Document ID:	2.25.26355015654855776	Template ID:	1.2.36.1.2001.1001.100.1002.223
Pathology Report			
Requesting Healthcare Provider		Authoring Pathology Provider	
Organisation:	XYZ General Practice	Organisation:	ABC Inc
HPI-O:	Unavailable	HPI-O:	8003 6245 4537 4000
Requested by:	Dr Adam Meyer	Authored by:	Dr Antonia Biscotti
HPI-I:	Unavailable	HPI-I:	8003 6145 8457 6521
Role:	General Practitioner	Role:	Pathologist
Address:	10 Smith St, Darwin, NT 0800	Address:	123 Bonna Vista Way, Darwin, NT 0800
Phone:	08 977 7777	Phone:	08 884 1111
Email:	admin@huntsmed.com.au	Email:	cytology@abcinc.com.au
NATA ID:		NATA ID:	12345689
Pathology Request ID:	Unavailable		
Request Date:	20-Dec-2013 8:30		
Laborator Sample ID:	Unavailable		
Report Date:	22-Jan-2014 14:00		
Report Name:	Unavailable		
Report ID:	D13-1435205		
Report status:	Preliminary		
Test Results			
Sample Collected Date:	20-Jan-2014 14:00		
Department Code:	Haematology		
Test Result Name:	FBC		
Test Result Status:	Final		
Sample Collected Date:	21-Jan-2014 17:00		
Department Code:	Forensic		
Test Result Name:	SLE		
Test Result Status:	Preliminary		
<<Link to PDF document>>			

Figure 2 - Example report

10 Pathology report scenarios

The following scenario explains the context in which a pathology report might relate to a subject of care. The scenario below is not exhaustive and offers context only when the authorisation to post has been captured.

Mary Brown visits her GP as she has been feeling weak and dizzy. The GP directs Mary directly to a pathologist for a pathology test. Mary is given a paper request generated by the CIS. Because the CIS can determine that Mary has a PCEHR, standing consent is assumed and the paper request form displays a tick beside the 'upload to the PCEHR' checkbox. After visiting the pathologist, Mary is instructed that the report will be ready within three business days and to return to her GP when possible.

The pathologist records the consent to post while the patient was present, and their CIS uploads the pathology report as soon as it is available.

11 Known issues

The following issues are outstanding. Any decisions made on these issues that impact the content of this document will need to be addressed in future versions of this document.

- High = issues that are most likely to impact downstream specifications
- Moderate = issues that require clarification
- Low = issues that will not impact downstream specification development

#	Issue	Importance
1	NEHTA understands the requester's organisation name is not always known, and that forcing this to be mandatory may be a challenge for implementers.	High
2	Requested date/time is mandatory but an understanding came from the co-design workshop that the requested date/time is not always known when patient presents (i.e. it is not written on the paper request).	High

Acronyms

This table lists abbreviations and acronyms in alphabetical order.

Term	Description
CDA	Clinical Document Architecture
CIS	clinical information system
GP	general practitioner
PCEHR	personally controlled electronic health record

Glossary

Term	Meaning
Clinical Document Architecture (CDA)	An XML-based mark-up standard intended to specify the encoding, structure and semantics of clinical documents for exchange. CDA is an ANSI-certified standard from Health Level Seven International (HL7).
document instance identifier	A unique identifier that, when combined with a document version, uniquely identifies each CDA document. Sometimes called a 'unique document identifier'.
Individual Healthcare Identifier – Individual (IHI)	A unique 16-digit number that identifies individuals within Australia who receive healthcare.
Healthcare Provider Identifier – Individual (HPI-I)	A unique 16-digit number used to identify providers who deliver healthcare in the Australian healthcare setting.
Healthcare Provider Identifier – Organisation (HPI-O)	A unique 16-digit number used to identify organisations who deliver care in the Australian healthcare setting.
MAY	When appearing in an information requirement, the verb MAY indicates an optional requirement.
non-PCEHR participant	A healthcare provider that is not connected to the PCEHR and may not have, or may not know, their HPI-O/HPI-I.
Pathology Discipline	The Pathology Discipline is a broad categorisation of the pathology results contained in a report largely grouped by the testing methods used or the types of disease being investigated (e.g. haematology).
pathology report (PDF)	The PDF attachment is an electronic representation of the clinical information that is returned to the requester.
Present in View Payload	This indicates if the attribute will be provided by the PCEHR in any view requested by a CIS. This does not indicate it will be available in the CIS user interface, report, or clinical document. Rather, it only indicates that it is provided in the view payload.
request	A pathology request initiated and generated by a requesting healthcare professional such as a GP or a specialist, before being fulfilled by a patient-determined pathology provider.
SHALL	When appearing in an information requirement, the verb SHALL indicates a mandatory requirement. Its negative form SHALL NOT indicates a prohibition.
SHOULD	When appearing in an information requirement, the verb SHOULD indicates a recommendation. Its negative form SHOULD NOT indicates an option that is not recommended.
standing consent	Allows treating healthcare providers to upload health information about patients to their eHealth record. Healthcare providers are permitted to assume patient consent unless the patient expressly and unambiguously removes their standing consent.