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PCEHR View Service
Technical Service Specification v1.6.1

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Approved for external use

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Product version history

Product version	Date	Release comments
1.0	20 Dec 2011	Draft for limited release
1.1	18 Jan 2012	Update to reflect Tiger Team feedback
1.2	18 April 2012	Added conformance points 31 to 40. Added Transmission Timestamp and Signature. Table 12 is now Timestamp Header. Table 13 is now Transmission Signature in SOAP Header Changed all XSD and WSDL files to latest version as of 11 April 2012. Added reference for ATS 5821 Added reference W3C-XML-1.1 PCEHR Header changed from section 4.1.1.3 to 4.1.1.5 **Updates related to document exchange:** Section 3.2.5, Table 5 replaced with new Document Metadata to XDS.b Document Entry mapping Table 9 replaced with new Document Metadata to XDS.b Document Entry mapping VIEW-T 8 Changed documentid from document unique identifier to entryUUID.
1.3	30 May 2012	Added getRepresentativeListView operation Added conformance points 41 to 43
1.4	6 Sept 2012	Added getIndividualDetailsView operation. Updated schemas and WSDLs
1.5	5 April 2013	See details in PCEHR B2B Gateway Service release note v1.4
1.6	13 November 2014	Update for PCEHR Release 5 to include Pathology, Diagnostic Imaging, Advance Care and Health Record Overview capabilities. Update to Health Record Overview section in both the getView and the Appendix section of the document.
1.6.1	31 December 2014	Minor editorial changes.

Table of contents

1 Introduction

1.1 Purpose

This document provides an implementable technical interface specification for the PCEHR View Service.

This document must be read in conjunction with the *PCEHR View Service - Logical Service Specification* [PCEHR-VS-LSS] and the *PCEHR Document Exchange using the IHE XDS.b Platform Technical Service Specification* [PCEHR-DE-TSS].

1.2 Intended audience

This document is intended for use by implementers of systems interfacing with the PCEHR system, such as clinical information systems (CIS) and conformant portals.

This includes:

- Developers and implementers of software products which seek to interact with the PCEHR system (normative)
- Jurisdictional eHealth programs (informative)
- The Australian Health Informatics Standards development community (informative).

This is a technical document which makes use of the UML 2.3 standard [UML2010].

This document assumes that the reader is familiar with:

- UML and service-oriented architecture concepts and patterns
- *PCEHR Concept of Operations* [PCEHR-CON-OPS], September 2011 release
- RM-ODP (Reference Model of Open Distributed Processing) reference model [RM-ODP]
- XDS.b Cross Document Exchange [XDS].
- *PCEHR View Service Logical Service Specification* [PCEHR-VS-LSS]
- ATS 5820-2010 *E-health Web Services Profile* ATS 5820-2010
- ATS 5821-2010 *E-health XML Secured Payload Profiles* ATS 5821-2010.

1.3 Context

The *PCEHR View Service Logical Service Specification* [PCEHR-VS-LSS] presents a platform-independent specification of the PCEHR View Service. This technical service specification presents an implementable interface that is supported by the PCEHR system and can be used by systems integrating to the PCEHR system.

Figure 1 shows how the set of operations addressed within this specification fit into the broader set of PCEHR functionality.

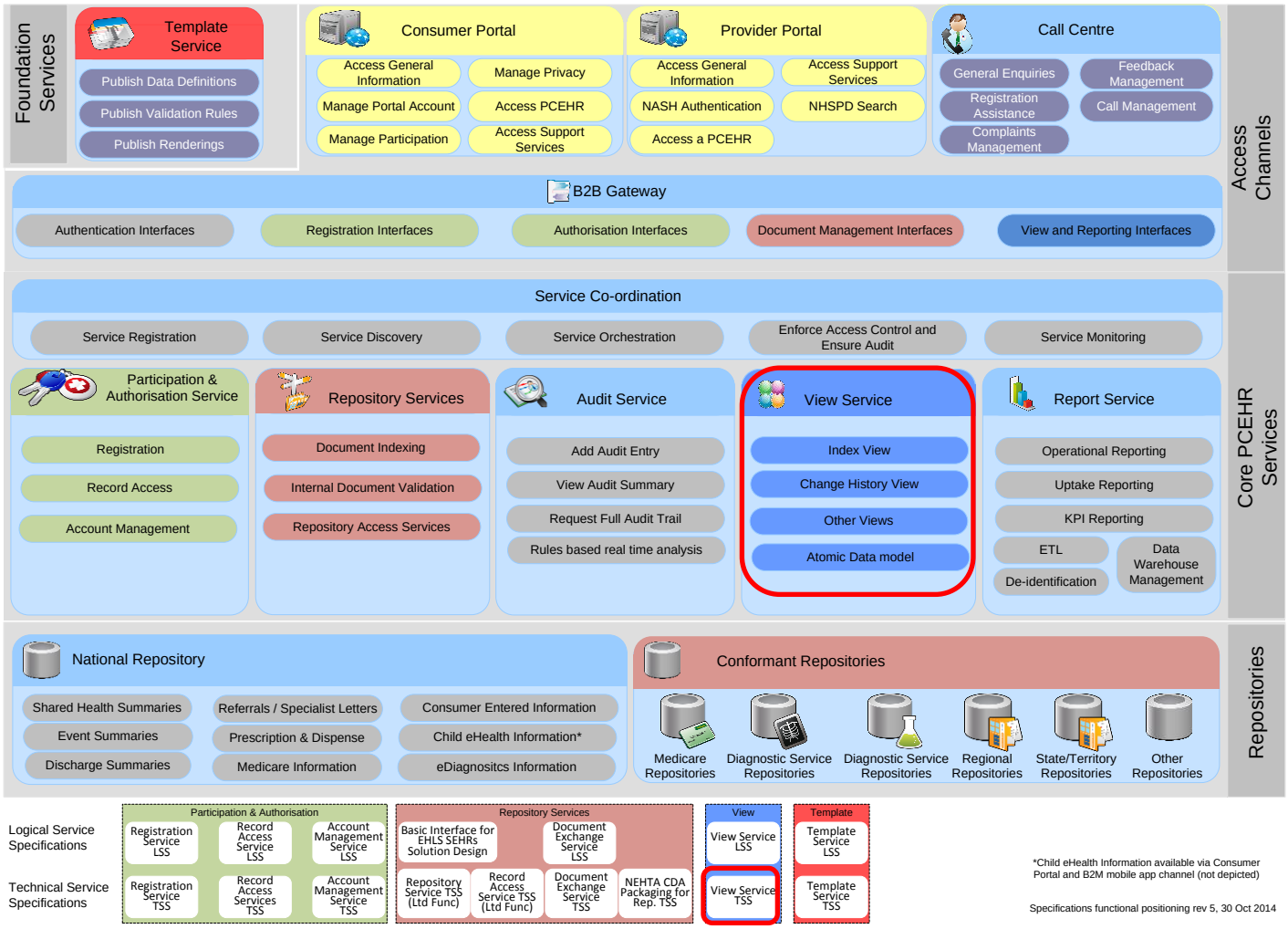

Figure 1 – PCEHR functions addressed

1.4 Scope of document

This technical service specification binds the services, services interfaces and operations defined in the logical service specification onto a technology platform to a level of detail sufficient to support the implementation of external interfacing systems.

1.4.1 In scope

The scope of this specification is to provide implementation level detail of the interfaces that external systems will use to interact with the PCEHR View Service.

The main scope of this specification can be summarised as:

- interface technical details (e.g. communication protocol, encoding)
- request and response message layouts
- message interactions
- error messages expected
- message transmission security
- operational details.

1.4.2 Out of scope

This document does not cover any user interaction via an integrated system or specify any user interface. This document deals solely with machine-level interactions.

1.5 Conformance points

This specification contains conformance points that identify normative requirements that are to be met by identified members of the View Service interface user system roles (as described in the logical service specification) in order to comply with this specification when interacting with the View Service interface.

Conformance points include requirements on a party (Service Invoker) invoking the service and the party (Service Provider) providing the service.

Any capability required to meet a conformance point **SHALL** be considered part of the requirements to be met under this specification.

Conformance points are identified within this document by the means of the following notation:

VIEW-T 0	This is an example only. Conformance points **SHALL** be numbered and contain an identifier of VIEW-T which identifies them as being applicable to the View Service technical service specification.

The keywords **SHALL**, **SHALL NOT**, **SHOULD** and **SHOULD NOT** in this document are to be interpreted as described in IETF's RFC 2119 [RFC2119].

Note that the conformance point numbering is non-consecutive in some sections; however, numbers remain uniquely assigned to each conformance points.

1.6 Document map

Figure 2 shows how this document and other PCEHR artefacts are grouped according to the eHealth Interoperability Framework layers of abstraction and viewpoints.

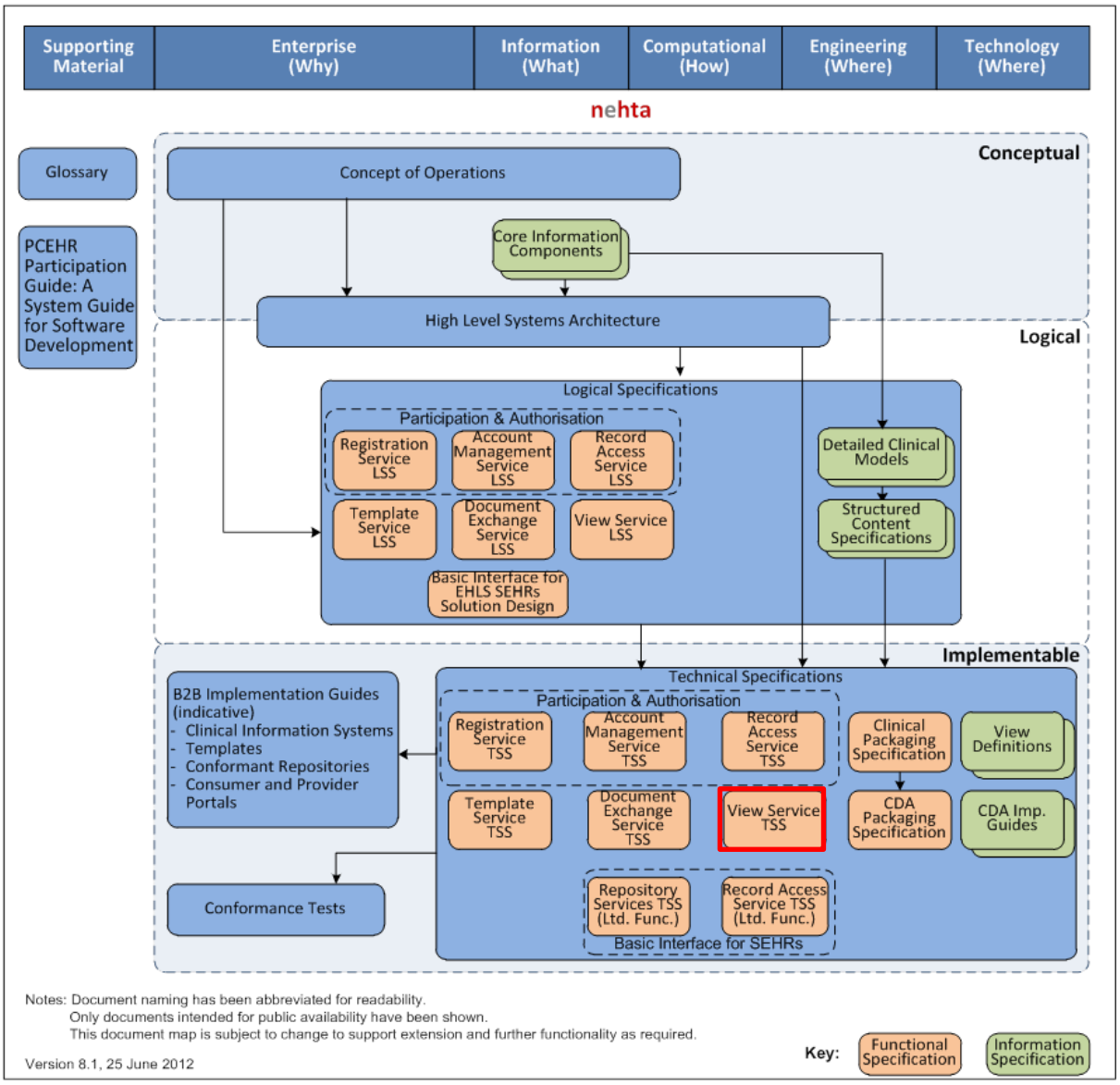

Figure 2 – Document map

2 Standards and technology platform

A standards and technology platform is a collection of standards and technologies that may be used collectively to realise an implementation of one or more service interfaces specified within a logical service specification.

A single service interface within a logical specification must be realised fully by a single technology platform. However, each service interface specified within a logical specification may be realised wholly on different standards and technology platforms.

The technology platform for this specification is comprised of interaction through web service interfaces that conform to the relevant elements of the Australian Technical Specification *E-health Web Services Profiles* [ATS 5820-2010] and IHE cross-enterprise document sharing-b [XDS] for document related operations. The technical specification for document exchange using XDS.b interface is defined in the *PCEHR Document Exchange using the IHE XDS.b Platform Technical Service Specification* [PCEHR-DE-TSS].

This specification depends on the following infrastructure services:

- Healthcare Identifiers (HI) Service for identification of healthcare provider organisations (HPI-O), healthcare provider individuals (HPI-I) and the subject of care (an individual identified by an IHI).
- The National Authentication Service for Health (NASH) for the provision of X.509 certificates used for signing and encryption.

Conformance points

The following conformance points define the application of the *E-health Web Services Profil*e [ATS 5820-2010] to service interactions:

VIEW-T 1	All implementations **SHALL** conform to the Web Services Base Profile from ATS 5820-2010 for all web service invocations.
VIEW-T 2	All implementations **SHALL** implement the TLS Security Profile from ATS 5820-2010 for all web service invocations.

3 Computational viewpoint

The computational viewpoint addresses how the service interfaces and service operations defined in the logical service specification map onto the operation and transport specifications provided by the standards and technology platform.

3.1 Security

VIEW-T 3	View Users **SHALL** use NASH certificates for authentication when implementing TLS Security Profile from ATS 5820-2010.
VIEW-T 31	The *Service Invoker* and *Service Provider* **SHALL** include a Transmission Signature (section 4.1.1.4) containing a signed attestation of elements contained within the SOAP message on all SOAP Request and Response messages, except where the response contains a SOAP Fault.
VIEW-T 32	The *Service Invoker* and *Service Provider* **SHALL** create the signature using a certificate that asserts the same identity as that asserted in the TLS connection.
VIEW-T 33	The *Service Provider* **SHOULD** respond to an invalid Transmission Signature by rejecting the entire message and responding with an error defined in ATS 5820-2010.

3.2 Service interface realisation

This section shows the service interfaces defined in the *PCEHR View Service – Logical Service Specification* [PCEHR-VS-LSS] and specifies how these are realised on the chosen technology platform.

Table 1 below shows how the logical operations are realised in this technical service specification.

Table 1 – Logical to technical service specification mapping table

Logical Service Specification (LSS)	Technical Service Specification (TSS)
getView	getView
getChangeHistoryView	getChangeHistoryView
getAuditView	getAuditView
getDocumentList	registryStoredQuery (ITI-18)
getRepresentativeList	getRepresentativeList
getIndividualDetailsView	getIndividualDetailsView

Conformance points

VIEW-T 4	All implementations **SHALL** comply with applicable conformance points specified in the *PCEHR View Service - Logical Service Specification* [PCEHR-VS-LSS].

3.2.1 getView

This operation returns the requested PCEHR view to the healthcare provider.

3.2.1.1 Actors and roles

Role 1: getView Service Invoker

The *getView Service Invoker* represents the party responsible for obtaining views from the PCEHR system. This role will typically be realised by a conformant portal, a clinical information system or a contracted service provider.

Role 2: getView Service Provider

The *getView Service Provider* role represents the party responsible for supplying views of information relating to PCEHR stored information, so that it may be accessed by authorised *Service Invoker*. This role will be fulfilled by the national PCEHR System.

3.2.1.2 Pre-condition

Conformance points

VIEW-T 5	The *Service Invoker* **SHALL** set the PCEHR individual IHI to the ihiNumber in the PCEHR Header.

3.2.1.3 Post-conditions

Conformance points

VIEW-T 6	The *Service Provider* **SHALL** return a response containing the PCEHR assembled view based on the access level of the healthcare provider organisation for the provided IHI.

3.2.1.4 Interaction

Conformance points

VIEW-T 7	This operation **SHALL** be realised as a synchronous call between the *Service Invoker* and the *Service Provider*.

3.2.1.5 Inputs, outputs and faults

This section details the data which is submitted to the service as an input, the response returned and the details of any faults. The data types are realised as XML Schema Definitions (XSD) (referenced in Appendix A).

The service interfaces will use the WSDLs referenced in Appendix A.

Input message

Table 2 – getView Input Message

Element Name	Type	Cardinality	Remarks
GetView		**1..1**	The schema elements are used to automatically determine what view it is
view	xs:any	1..1	Refer to individual view parameters below for each type of view
/GetView			

The schema elements are used to automatically determine which view is being requested by the Service Invoker. The XSD has a strongly typed schema. This includes all of the views under a single choice element. When parsing the XML data against this, it will automatically determine which view it is.

For details on the different views' input parameters, please refer to Section 4.2 in this document.

Output message

Table 3 – getView output message

Element Name	Type	Cardinality	Remarks
GetViewResponse		**1..1**	
ResponseStatus		**1..1**	
code	String	1..1	Status Code for the result of the transaction
description	String	1..1	Brief status description
details	String	0..1	Additional detail of the response
/ResponseStatus			
View		**0..1**	
templateID	String	1..1	Template identifier for template used to display the CDA view
data	xs:Any (Base64Binary custom XML or ZIP)	1..1	Use MTOM/XOP to optimise transmission. For a details on the different views <data> returned, see section 4.2 PCEHR Views in this document.
/View			
/GetViewResponse			

For details on the different view <data> returned please refer to Section 4.2 in this document. The view data in the output message will depend on the getView input message <view> parameters.

Informative note

With the exception of naming conventions and explicit support for MTOM-XOP, this technical service specification is closely aligned with the specification provided within ATS 5820-2010 *E-health Web Services Profiles*.

The Message Transmission Optimization Mechanism (MTOM) is used to separate out binary data, which is otherwise base64-encoded, and send it in separate binary attachments using a MIME Multipart/Related message.

Sending the data in binary format significantly reduces its size, thus optimising the transmission of the SOAP message.

XOP processing is used to serialise it into a MIME Multipart/Related message. The XOP processing extracts the base64Binary data from the SOAP message and packages it as separate binary attachments.

Service fault

Please refer to the error codes in Section 4.1.2.2.

3.2.2 getChangeHistoryView

This operation returns the list of document metadata that has been registered to the PCEHR system for a specific document.

XDS.b AdhocQueryResponse object is used to represent the list of document metadata.

3.2.2.1 Actors and roles

Role 1: getChangeHistoryView Service Invoker

The *getChangeHistoryView Service Invoker* role represents the party responsible for obtaining views from the PCEHR system. This role will typically be realised by a conformant portal, a clinical information system or a contracted service provider.

Role 2: getChangeHistoryView Service Provider

The *getChangeHistoryView Service Provider* role represents the party responsible for supplying views of information relating to PCEHR stored information, so that it may be accessed by authorised users. This role will be fulfilled by the national PCEHR system.

3.2.2.2 Pre-condition

Conformance points

VIEW-T 8	The *Service Invoker* **SHALL** set the documentId to the document unique identifier for which the document change history information is being requested.

3.2.2.3 Post-conditions

Conformance points

VIEW-T 9	The *Service Provider* **SHALL** return sets of document change history information for the specified document.
VIEW-T 10	The *Service Provider* **SHALL NOT** return sets of document change history information when the healthcare provider organisation does not have access to the specified document.

3.2.2.4 Interaction

Conformance points

VIEW-T 11	This operation **SHALL** be realised as a synchronous query between the *Service Invoker* and the *Service Provider*. The response **SHALL** be returned on the same software communication connection.

3.2.2.5 Inputs, outputs and faults

This section details the data which is submitted to the service as an input, the response returned and the details of any faults. The data types are realised as XSDs (reference in Appendix A).

The WSDLs and service interfaces for this service are referenced in Appendix A.

Input message

Table 4 – getChangeHistoryView Input Message

Element Name	Type	Cardinality	Remarks
getChangeHistoryView		**1..1**	
documentID	String	1..1	The identifier for a document
/getChangeHistoryView			

Output message

This operation returns IHE XDS.b AdhocQueryResponse, which contains a list of document metadata from the document registry.

Please refer to query.xsd for AdhocQueryResponse. The query.xsd is in the XDS.b - supporting material [XDS.b SM] (/schema/ebRS).

Table 5 is the mapping table for the DocumentMetadata realisation to the XDS.b document registry.

Table 5 – Logical Document Metadata Mapping Table

LSS field	Description	XDS.b field name
Authoring Organisation	The identifier of the organisation that authored the document.	XDSDocumentEntry. authorInstitution
Authoring Individual	The identifier of the individual that authored the document.	XDSDocumentEntry. authorPerson
Document Type Code	A code relating to the type of document being retrieved.	XDSDocumentEntry. classCode
Document Type Display Name	A display friendly name for the document type.	XDSDocumentEntry. classCodeDisplayName
PCEHR Template Identifier	The identifier of the template this document conforms to.	XDSDocumentEntry. formatCode
Document ID	A unique object identifier relating to the document. This must be unique within the PCEHR system and must be equivalent to the identifier of the root CDA Document within the CDA Package.	XDSDocumentEntry. uniqueId
Title	An optional title for the given document.	XDSDocumentEntry. title
Document Creation Time	The time the document was created.	XDSDocumentEntry. creationTime

LSS field	Description	XDS.b field name
Service Start Time	The datetime the service being performed, which caused the document to be created, started.	XDSDocumentEntry. serviceStartTime
Service Stop Time	The datetime the service being performed, which caused the document to be created, stopped. The Service Stop Time may be set to the same value as the Service Start Time in order to indicate the datetime of an event.	XDSDocumentEntry. serviceStopTime
Document Hash	A SHA-1 hash representation of the document.	XDSDocumentEntry.hash
Keyword	One or more keywords that are related to the document submission. Both these fields must be *excluded* from submission.	XDSDocumentEntry. eventCodeList
		XDSDocumentEntry. eventCodeListDisplayName
Healthcare Facility Type Code	A code identifying the type of healthcare facility where the event relating to this document submission request initiated.	XDSDocumentEntry. healthcareFacilityTypeCode
Healthcare Facility Type Name	A display friendly name for the above code.	XDSDocumentEntry. healthcareFacilityTypeCodeDisplayName
Clinical Speciality Code	A code identifying the clinical specialty where the event relating to this document submission request initiated.	XDSDocumentEntry. practiceSettingCode
Clinical Specialty Display Name	A display friendly name for the above specialty.	XDSDocumentEntry. practiceSettingCodeDisplayName
N/A	This field is not present in the LSS definition of the Document Metadata as it is in the Common Header. The value from the common header should be replicated into this field.	XDSDocumentEntry. sourcePatientId
N/A	This mandatory XDS.b field is not supported by PCEHR. It shall be set to a value of 'NA'.	XDSDocumentEntry. confidentialityCode
N/A	This field is not required by the logical model presented within the LSS but is a mandatory field within XDS. This field shall be set to the same value as that provided in the classCode field.	XDSDocumentEntry. typeCode
N/A	This field is not required by the logical model presented within the LSS but is a mandatory field within XDS. This field shall be set to the same value as that provided in the classCodeDisplayName field.	XDSDocumentEntry. typeCodeDisplayName
Common Header. IHI Number	This value **SHALL** be set to the same value as the XDSDocumentEntry.sourcePatientId.	XDSDocumentEntry. patientId

LSS field	Description	XDS.b field name
N/A	This field is not required by the logical model presented within the LSS but is a mandatory field within XDS. Set to a fixed value of 'en-AU'.	XDSDocumentEntry. languageCode
N/A	The MIME type of the document provided. This field is set to a fixed value of 'application/zip'.	XDSDocumentEntry. mimeType
N/A	This will be the entryUUID allocated to the XDS Document Entry object within the PCEHR registry.	XDSDocumentEntry. entryUUID
N/A	The size of the CDA document. This field is mandatory for ITI-42 document registrations.	XDSDocumentEntry. size

Service FAULT

Please refer to section 4.2.6 of the *PCEHR Document Exchange using the IHE XDS.b Platform Technical Service Specification* [PCEHR-DE-TSS] for the XDS Service Fault.

3.2.3 getAuditView

This operation returns an audit trail from the PCEHR system for organisations and individuals. The organisation may be either a healthcare provider or, in an exceptional case, a non-healthcare provider. Healthcare providers obtain their identification (HPI-O) from the HI Service to access and view audit trails. However, organisations that are not healthcare providers receive a special identifier from the PCEHR system operator to access and view audit trails. Individuals, on the other hand, obtain their identification number IHI from the HI Service to access and view audit trails of their own PCEHR.

The getAuditView operation returns information based on the type of identifier supplied, as follows:

- If the getAuditView service receives a request from a healthcare provider organisation with an HPI-O, then the getAuditView returns the audit events of the provider across multiple PCEHRs.
- If the getAuditView service receives a request for a non-healthcare organisation with a specially issued identifier from the PCEHR system operator, then the getAuditView returns the audit events of the non-healthcare provider across multiple PCEHRs.
- If the getAuditView service receives a request from an individual with an IHI, then only the audit events for the PCEHR that the individual owns will be returned.

The audit view data presented to the requestor will contain data appropriate for the requestor's access rights and role in the system.

Organisation requestors are able to access only a subset (a limited section) of audit events, while consumers (the owners of PCEHRs) can access all their audit events.

3.2.3.1 Actors and roles

Role 1: getAuditView Service Invoker

The *getAuditView Service Invoker* role represents the party responsible for obtaining views from the PCEHR system. This role will typically be realised by a conformant portal, a clinical information system or a contracted service provider acting on behalf of one of those system types.

Role 2: getAuditView Service Provider

The *getAuditView Service Provider* role represents the party responsible for supplying views of information relating to PCEHR stored information, so that it may be accessed by authorised users. This role will be fulfilled by the national PCEHR system.

3.2.3.2 Pre-condition

Conformance points

VIEW-T 12	The *Service Invoker* **SHALL** set the Date To and Date From.

3.2.3.3 Post-conditions

Conformance points

VIEW-T 13	The *Service Provider* **SHALL** return an audit trail applicable to the PCEHR role within the specified period of time defined in the input message.

3.2.3.4 Interaction

Conformance points

VIEW-T 14	This operation **SHALL** be realised as a synchronous query between the *Service Invoker* and the *Service Provider*. The response **SHALL** be returned on the same software communication connection.

3.2.3.5 Inputs, outputs and faults

This section details the data which is submitted to the service as an input, the response returned and the details of any faults. The data types are realised as XSDs as referenced in Appendix A.

The WSDLs and service interfaces for this service are also referenced in Appendix A.

Input message

Table 6 – getAuditView Input Message

Element Name	Type	Cardinality	Remarks
GetAuditView		**1..1**	
dateFrom	dateTime	1..1	The start date of the date range
dateTo	dateTime	1..1	The end date of the date range
/GetAuditView			

Output message

Table 7 – getAuditView Output Message

Element Name	Type	Cardinality	Remarks
GetAuditViewResponse		**1..1**	
ResponseStatus		**1..1**	
code	String	1..1	Status code for the result of the transaction
description	String	1..1	Brief status description
details	String	0..1	Additional detail of the response
/ResponseStatus			
AuditView		**0..1**	
EventTrail		**1..***	
businessEvent	String	1..1	Unique internal event identifier
eventTimeStamp	DateTime	1..1	Business event date time
AuditEvent		**0..1**	
auditEventID	String	0..1	Unique identifier of audit event
ParticipantDetails		**0..1**	
providerID	String	0..1	HPI-I number
providerName	String	0..1	Provider name
accessingHPIO	String	0..1	An identifier accepted by the PCEHR system operator
accessingHPIOName	String	0..1	Accessing organisation Name
participatingHPIO	String	0..1	Participating organisation
participatingHPIOName	String	0..1	Participating organisation name
userID	String	0..1	User Id
userName	String	0..1	User Name
displayRole	String	0..1	The role of the participant
/ParticipantDetails			
AccessedEntity		**0..1**	
ihiNumber	String	0..1	IHI number
ihiName	String	0..1	Individual name
subjectType	String	0..1	Subject type
subject	String	0..1	Subject
/AccessedEntity			

Element Name	Type	Cardinality	Remarks
ParticipantAction		**0..1**	
actionType	String	0..1	Create, Read, Update, Delete
operationPerformed	String	0..1	Operation performed
reason	String	0..1	IncorrectIdentity, MedicalInaccuracy, ElectToRemove, IHIStatusIsDecreased, NoLegalAppointmentAuthorised, NoOwnershipOfPCEHR, IHINotActive, IHINotVerified, TermsAndConditionsWereNotAccepted, Death, WithdrawalFromParticipation
approvalDatetime	DateTime	0..1	Approval date time
approvalRole	String	0..1	Approval role
approvalName	String	0..1	Approval name
statusPriorActivation	String	0..1	Status prior activation
/ParticipantAction			
AccessConditions		**0..1**	
accessLevel	String	0..1	Self, General, Limited
accessPermission	String	0..1	Permit, Deny
accessConditions	String	0..1	OpenAccess, PACAccess, PACXAccess, EmergencyAccess, LocalConsentAccess, AuthorisedRepresentativeAccess, NominatedRepresentativeAccess, IncorrectCode, LocalConsentAccessDenied, AccessRevoked Note that PACC is now called Record Access Code. PACCX is now called Limited Document Access Code. However the reference data strings representing these remain unchanged.
/AccessConditions			
/AuditEvent			
LogEvent		**0..1**	
messageLogLevel		1..1	WARN,ERROR,DEBUG,FATAL, AUDIT,INFO
StatusDetails		**1..1**	
code	String	1..1	Code
description	String	1..1	Description

Element Name	Type	Cardinality	Remarks
details	String	0..1	Details
/StatusDetails			
ErrorDetails		**0..1**	
code	String	1..1	PCEHR_SUCCESS, PCEHR_ERROR_1600
description	String	1..1	Description depending on the code. Will reflect the category of codes such as a description of Success, Technical Failure or Functional Failure
details	String	0..1	Details
/ErrorDetails			
/LogEvent			
/EventTrail			
/AuditView			
/GetAuditViewResponse			

Service fault

Please refer to the error codes in Section 4.1.2.2.

3.2.4 registryStoredQuery

The getDocumentList operation is realised using registryStoredQuery operation defined in the *PCEHR Document Exchange using the IHE XDS.b Platform Technical Service Specification* section 3.3.3.

This operation returns a list of XDS.b XDSDocumentEntry objects that can be realised to derive document list within the client system.

3.2.4.1 Actors and roles

Role 1: registryStoredQuery Service Invoker

The *registryStoredQuery Service Invoker* role represents the party responsible for obtaining views from the PCEHR system. This role will typically be realised by a conformant portal, a clinical information system or a contracted service provider acting on behalf of one of those system types.

Role 2: registryStoredQuery Service Provider

The *registryStoredQuery Service Provider* role represents the party responsible for supplying views of information relating to PCEHR stored information, so that it may be accessed by authorised users. This role will be fulfilled by the national PCEHR system.

3.2.4.2 Pre-conditions

Conformance points

VIEW-T 15	The *Service Invoker* shall comply with all the pre-condition conformance points defined in the *PCEHR Document Exchange using the IHE XDS.b Platform Technical Service Specification,* Section 3.3.3 ITI-18 Registry Stored Query.

3.2.4.3 Post-conditions

Conformance points

VIEW-T 16	The *Service Invoker* shall comply with all the post-condition conformance points defined in the *PCEHR Document Exchange using the IHE XDS.b Platform Technical Service Specification*, Section 3.3.3 ITI-18 Registry Stored Query.

3.2.4.4 Interaction

Conformance points

VIEW-T 17	The *Service Invoker* shall comply with all the interaction conformance points defined in the *PCEHR Document Exchange using the IHE XDS.b Platform Technical Service Specification*, Section 3.3.3 ITI-18 Registry Stored Query.

3.2.4.5 Inputs, outputs and faults

All inputs, outputs and faults data types are defined in the *PCEHR Document Exchange using the IHE XDS.b Platform Technical Service Specification*, section 3.3.3.

Input message

Please refer to query.xsd in Appendix A for AdhocQueryRequest.

VIEW-T 18	The *Service Invoker* **SHALL** comply with the query id defined in *PCEHR Document Exchange using the IHE XDS.b Platform Technical Service Specification*, section 3.3.3 ITI-18 Registry Stored Query.
VIEW-T 19	The *Service Invoker* **SHALL** comply with the query parameter defined in *PCEHR Document Exchange using the IHE XDS.b Platform Technical Service Specification*, section 3.3.3 ITI-18 Registry Stored Query.

Output message

Please refer to query.xsd or AdhocQueryResponse (the query.xsd is in the XDS.b - supporting material [XDS.b SM] /schema/ebRS) and *PCEHR Document Exchange using the IHE XDS.b Platform Technical Service Specification*.

Service fault

Please refer to the *PCEHR Document Exchange using the IHE XDS.b Platform Technical Service Specification*.

3.2.5 getRepresentativeList

This operation returns the list of representatives associated with a particular individual's PCEHR.

3.2.5.1 Actors and roles

Role 1: getRepresentativeListView Service Invoker

The *getRepresentativeListView Service Invoker* role represents the party responsible for obtaining views from the PCEHR system. This role will be typically realised by a conformant portal, a clinical information system or a contracted service provider.

Role 2: getRepresentativeList Service Provider

The *getRepresentativeList Service Provider* role represents the party responsible for supplying views of information relating to PCEHR stored information, so that it may be accessed by the authorised *Service Invoker*.

3.2.5.2 Pre-condition

Conformance points

VIEW-T 41	The *Service Invoker* **SHALL** set the PCEHR individual IHI to the ihiNumber in the PCEHR Header.

3.2.5.3 Post-conditions

Conformance points

VIEW-T 42	The *Service Provider* **SHALL NOT** return the list of Nominated Representatives when the request is from a healthcare provider organisation or individual.

3.2.5.4 Interaction

Conformance points

VIEW-T 43	This operation **SHALL** be realised as a synchronous call between the *Service Invoker* and the *Service Provider*. The response **SHALL** be returned on the same software communication connection.

3.2.5.5 Inputs, outputs and faults

This section details the data which is submitted to the service as an input, the response returned and the details of any faults. The data types are realised as XML Schema Definitions (XSD) (referenced in Appendix A).

The WSDLs and service interfaces for this service are also referenced in Appendix A.

Input message

Table 8 – getRepresentativeList Input Message

Element Name	Type	Cardinality	Remarks
getRepresentativeList		**1..1**	
/getRepresentativeList			

Output message

Table 9 – getRepresentativeList Output Message

Element Name	Type	Cardinality	Remarks
getRepresentativeListResponse		**1..1**	
responseStatus			
code	String	1..1	Status code for the result of the transaction
description	String	1..1	Brief status description
details	String	0..1	Additional details of the response
/responseStatus			
PCEHRRecord		**0..1**	
representativeList		1..1	
representative		1..*	
ID	String	1..1	PCEHR Identity
Type		1..1	Values (‘Authorised Representative’, ‘Legally Appointed Authorised Representative’, ‘Parent’, ‘Guardian’, ‘Nominated Representative’)
name		1..1	The full name of the representative
nameTitle	String	0..1	Refer to TECH.SIS.HI.02 section 2 [TECH.SIS.HI.02]
familyName	String	1..1	Individual surname
givenName	String	0..2	Individual given names
nameSuffix	String	0..1	Refer to TECH.SIS.HI.02 section 2
usage	String	0..1	Values ('M', 'N', 'O', 'B', 'L', 'R')
preferred	String	0..1	Values ('true', 'false')
conditionalUse	String	0..1	Values ('1'', '2', '3', '4')
/name			
address		0..1	
unstructuredAddressLine		**0..1**	
australianAddressLine	String	0..1	
postcode	String	1..1	Property postcode
suburb	String	1..1	Property suburb name
state	String	1..1	Refer to TECH.SIS.HI.02 section 16
/unstructuredAddressLine			

Element Name	Type	Cardinality	Remarks
australianStreetAddress		**0..1**	
state		1..1	Refer to TECH.SIS.HI.02 section 16
postcode		1..1	Property postcode
suburb		1..1	Property suburb name
addressSiteName		0..1	Full name of physical building or property
unitGroup			
unitType	String	1..1	Mandatory if level number is present. Refer to TECH.SIS.HI.02 section 14
unitNumber	String	0..1	Mandatory if unit type is present
/unitGroup			
levelGroup			
levelType	String	1..1	Mandatory if level type is present
levelNumber	String	0..1	Mandatory if level number is present. Refer to TECH.SIS.HI.02 section 14
/levelGroup			
lotNumber	String	0..1	Mandatory if street number is not present
streetNumber	String	0..1	Numeric or alphanumeric reference of property street number
streetName	String	1..1	Property street name
streetType	String	0..1	Refer to TECH.SIS.HI.02 section 13
streetSuffix	String	0..1	Refer to TECH.SIS.HI.02 section 17
/australianStreetAddress			
australianPostalAddress		**1..1**	
state	String	1..1	Refer to TECH.SIS.HI.02 section 16
postcode	String	1..1	Property postcode
suburb	String	1..1	Property suburb name
postalDeliveryGroup			
postalDeliveryType	String	1..1	Refer to TECH.SIS.HI.02 section 18
postalDeliveryNumber	String	0..1	Channel of postal delivery. Mandatory if postal delivery type

Element Name	Type	Cardinality	Remarks
			code is present, unless type code is Care PO, CMA or CMB
/postalDeliveryGroup			
/australianPostalAddress			
/address			
/representative			
/representativeList			
/PCEHRRecord			
/getRepresentativeListResponse			

Note: The address is optional—it will not be populated. It is provided for future use.

Service fault

Please refer to the error codes in Section 4.1.2.2.

3.2.6 getIndividualDetailsView

This operation getIndividualDetailsView returns the details about the individual consumer, including information such as name, date of birth, age, emergency contact and carer information. It does not return the individual consumer's mailing address when a provider requests to view an individual's details.

3.2.6.1 Actors and roles

Role 1: getIndividualDetailsView Service Invoker

The *getIndividualDetailsView Service Invoker* role represents the party responsible for obtaining views from the PCEHR system. This role will be typically realised by a conformant portal, a clinical information system or a contracted service provider.

Role 2: getIndividualDetailsView Service Provider

The *getIndividualDetailsView Service Provider* role represents the party responsible for supplying views of information relating to PCEHR stored information, so that it may be accessed by an authorised Service Invoker.

3.2.6.2 Pre-condition

Conformance points

VIEW-T 44	The *Service Invoker* **SHALL** set the PCEHR individual IHI to the ihiNumber in the PCEHR Header.

3.2.6.3 Post-conditions

Conformance points

VIEW-T 46	The *Service Provider* **SHALL NOT** return the mailing address of the individual consumer when the request is from a healthcare provider.

3.2.6.4 Interaction

Conformance points

VIEW-T 45	This operation **SHALL** be realised as a synchronous call between the *Service Invoker* and the *Service Provider*. The response **SHALL** be returned on the same software communication connection.

3.2.6.5 Inputs, outputs and faults

This section details the data that is submitted to the service as an input, the response returned and the details of any faults. The data types are realised as XML Schema Definitions (XSD) (referenced in Appendix A).

The WSDLs and service interfaces for this service are also referenced in Appendix A.

Input message

Table 10 – getIndividualDetailsView Input Message

Element Name	Type	Cardinality	Remarks
getIndividualDetailsView		**1..1**	
/getIndividualDetailsView			

Output message

Table 11 – getIndividualDetailsView Output Message

Element Name	Type	Cardinality	Remarks
getIndividualDetailstViewResponse		**1..1**	
responseStatus		**1..1**	
code	String	1..1	Status code for the result of the transaction
description	String	1..1	Brief status description
details	String	0..1	Additional details of the response
/responseStatus			
individual		0..1	
name		1..1	
nameTitle	String	0..1	Refer to TECH.SIS.HI.02 section 2
familyName	String	1..1	Individual surname
givenName	String	0..2	Individual given names

Element Name	Type	Cardinality	Remarks
nameSuffix	String	0..1	Refer to TECH.SIS.HI.02 section 2
usage	String	0..1	Values ('M', 'N', 'O', 'B', 'L', 'R')
preferred	String	0..1	Values ('true', 'false')
conditionalUse	String	0..1	Values ('1'', '2', '3', '4')
/name			
sex	String	1..1	Values ("F", "I", "M", "N")
dateOfBirth	Date	1..1	
dateAccuracyIndicatorType	String	0..1	
ihiRecordStatus	String	0..1	Values ('Verified', 'Unverified')
ihiStatus	String	0..1	Values ('Active', 'Deceased', 'Retired', 'Resolved', 'Expired')
ihiNumber	String	1..1	IHI number
contactDetails		0..1	
mobilePhoneNumber	String	0..1	
emailAddress	String	0..1	
/contactDetails			
contactPersons		**0..1**	
contactPerson		**1..***	
type	String	1..1	Values ("Emergency", "Next of Kin", "Carer")
name	String	1..1	Contact full name
phoneNumber	String	0..1	Contact phone number
emailAddress	String	0..1	Contact email address
relationship	String	0..1	Description of the relationship between the record holder and the emergency contact, next of kin or carer (e.g. son, father, aunt, uncle, friend, etc)
/contactPerson			
/contactPersons			
indigenousStatus	String	1..1	Values (‘1’,’2’,’3’,’4’,’9’). Refer to METeOR identifier: 291036[1]
/individual			
/getIndividualDetailsViewResponse			

[1] See meteor.aihw.gov.au from Australian Institute for Health and Welfare

Service fault

Please refer to the error codes in Section 4.1.2.2.

4 Information viewpoint

The information viewpoint addresses common information models that are used in the service operations defined in the computational viewpoint.

4.1 Information data type realisation

This section describes the information data type realisation from the logical service specification [PCEHR-VS-LSS] into this technical specification.

4.1.1 Common Header

Common Header is realised into the SOAP Header on web service calls as:

- WS-Addressing Header
- Timestamp
- Signature
- PCEHRHeader

4.1.1.1 WS-Addressing header (Request)

Table 12 – WS-Addressing Header (Request)

Element Name	Type	Cardinality	Remarks
WS-Addressing		**1..1**	
MessageId	UUID	1..1	Unique id for the message. E.g. uuid:95b48e68-5dfc-4dbd-ab05-aaa855cec03f
To	anyURI	1..1	Value: e.g. http://www.w3.org/2005/08/addressing/anonymous
Action	anyURI	1..1	Identifier (full namespace) of the virtual service being invoked.
/WS-Addressing			

Conformance points

VIEW-T 20	The *Service Invoker* **SHALL** set these values in accordance with ATS 5820-2010, Section 6 - Metadata.

4.1.1.2 WS-Addressing header (Response)

Table 13 – WS-Addressing Header (Response)

Element Name	Type	Cardinality	Remarks
WS-Addressing		**1..1**	
MessageId	UUID	1..1	Unique id for the message. E.g. uuid:95b48e68-5dfc-4dbd-ab05-aaa855cec03f
RelatesTo	UUID	1..1	MessageId of the original service request.
Action	anyURI	1..1	Identifier (full namespace) of the virtual service being invoked.
/WS-Addressing			

Conformance points

VIEW-T 21	The *Service Provider* **SHALL** set these values in accordance with ATS 5820-2010, Section 6 - Metadata.

4.1.1.3 Transmission timestamp

Table 14 – Timestamp Header

Element Name	Type	Cardinality	Remarks
timestamp		**1..1**	
created	dateTime	1..1	Time at SOAP message creation. Inclusive of Date, Time and UTC Timezone. E.g. 2011-10-25T03:06:13Z
expires	dateTime	0..1	For future use.
/timestamp	**-**	**-**	**-**

4.1.1.4 Transmission signature

Table 15 – Transmission Signature in SOAP Header

Element Name	Type	Cardinality	Remarks
signature		**1..1**	
signature	ds:signature	1..1	A signed attestation of key SOAP message elements using the ATS 5821 specification.
/signature	**-**	**-**	**-**

VIEW-T 34	The element signed by the Transmission Signature by all parties **SHALL** include a SOAP Body Element.
VIEW-T 36	The elements signed by the Transmission Signature by the *Service Invoker* **SHALL** also include PCEHR Header element (as defined in Section 4.1.1.5).
VIEW-T 38	The elements signed by the Transmission Signature **SHOULD** include the Transmission Timestamp element (as defined in Section 3.1).
VIEW-T 39	The *Service Invoker* and *Service Provider* **SHALL** calculate the ds:DigestValue as specified in "section 4. XML Signature Profile" of ATS 5821-2010 prior to the application of MTOM/XOP.
VIEW-T 40	The ds:SignedInfo element type **SHALL** be realised in conformance with "section 4. XML Signature Profile" as specified in ATS 5821-2010.
VIEW-T 47	The fragment identifier used within the ds:Reference element, specified in "section 4. XML Signature Profile" of ATS 5821-2010, **SHALL** refer to the "ID" attribute specified in section 3.3 of W3C-XML-1.1 of the element referenced [W3C-XML].
VIEW-T 48	As specified in ATS 5821-2010, the ds:signature element type **SHALL** be realised in conformance with section 4. XML Signature Profile".

4.1.1.5 PCEHRHeader

PCEHRHeader is used for all interactions with the PCEHR system.

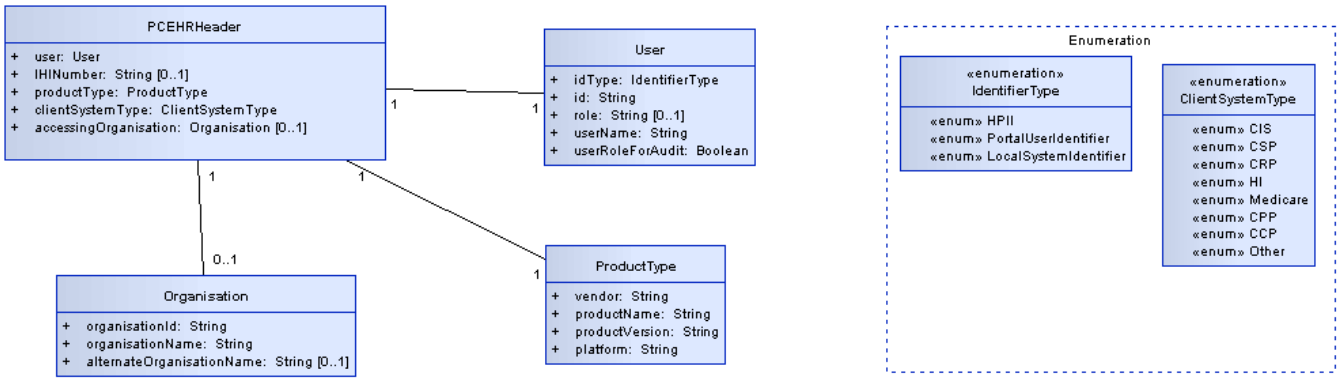

Figure 3 – PCEHRHeader

Table 16 – PCEHRHeader

Element Name	Type	Cardinality	Remarks
PCEHRHeader		**1..1**	
User		**1..1**	
IDType	IdentifierType	1..1	Values ("HPII", "PortalUserIdentifier", "LocalSystemIdentifier")
ID	String	1..1	PCEHR identity, 16 digit HPI-I number or Other User ID
role	String	0..1	Optional User Role
userName	String	1..1	Username

Element Name	Type	Cardinality	Remarks
useRoleForAudit	Boolean	1..1	If true, PCEHR will use sourceSystemUserRole as the user name for audit, else PCEHR will use sourceSystemUserName as the user name for audit
/User			
iHINumber	String	0..1	PCEHR individual's 16-digit IHI number
productType		**1..1**	
vendor	String	1..1	Client system's vendor name
productName	String	1..1	Client system's product name
productVersion	String	1..1	Client system's product version
platform	String	1..1	Client system's platform
/productType			
clientSystemType	String	1..1	Values ("CCP","CPP", "CIS", "CSP", "CRP", "HI", "Medicare", "Other")
accessingOrganisation		**0..1**	
organisationID	String	1..1	The 16-digit Healthcare Organisation Identifier (HPI-O) or approved alternative (a unique identifier issued by the PCEHR System Operator e.g. a PAI-O)
organisationName	String	1..1	Organisation Name
alternateOrganisationName	String	0..1	Alternate Organisation Name
/ accessingOrganisation			
/PCEHRHeader			

Conformance points

VIEW-T 22 The *Service Invoker* **SHALL** set the ihiNumber to the IHI of the individual who owns the PCEHR.

VIEW-T 23 The *Service Invoker* **SHALL** set the accessingOrganisation to the accessing organisation attempting to query the PCEHR.

VIEW-T 24 The *Service Invoker* **SHALL** set the User.ID to either:

- Preferably, if known, the 16-digit of HPI-I of the provider attempting to access the PCEHR;
- Or alternatively, a local identifier of the provider/support operator attempting to access the PCEHR.

VIEW-T 25 The *Service Invoker* **SHALL** set the User.IDType to the relevant value to identify the type of User.ID.

VIEW-T 26 The *Service Invoker* **SHALL** set the productType.vendor to the vendor name of the client system.

VIEW-T 27	The *Service Invoker* **SHALL** set the productType.productName to the product name of the client system.
VIEW-T 28	The *Service Invoker* **SHALL** set the productType.productVersion to the product version of the client system.
VIEW-T 29	The *Service Invoker* **SHALL** set the productType.platform to the client system vendor.

4.1.2 Output message data types

4.1.2.1 Common response status

All PCEHR system operations will return common response field.

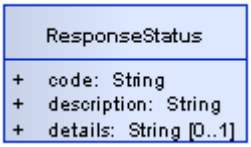

Figure 4 – ResponseStatus

Table 17 – ResponseStatus Responses

Element Name	Type	Cardinality	Remarks
ResponseStatus		**1..1**	
code	String	1..1	Status Code for the result of the transaction
description	String	1..1	Brief status description
details	String	0..1	Additional detail of the response
/ ResponseStatus			

Conformance points

VIEW-T 30	The *Service Provider* **SHALL** set the appropriate code from Table 18 for any business failure.

4.1.2.2 Error codes

The PCEHR success and error codes in Table 18 are applicable to the View Service.

Note: The error code tables may be subject to extension as the development of the PCEHR system progresses.

Table 18 – Response Codes

Code	Description	View web service
PCEHR_SUCCESS	SUCCESS	All
PCEHR_ERROR_0004	Authorisation denied (e.g. insufficient privileges to retrieve the view)	All
PCEHR_ERROR_0011	Unexpected service exception error (e.g. in case view cannot be generated)	All
PCEHR_ERROR_0015	IHI is required	All
PCEHR_ERROR_0016	Invalid service version	getView
PCEHR_ERROR_0138	Invalid start date	getView
PCEHR_ERROR_0139	Invalid end date	getView
PCEHR_ERROR_0506	Invalid request	All
PCEHR_ERROR_1600	Too many entries found (more than 500 entries)	getAuditView
PCEHR_ERROR_3002	Document metadata failed validation	getChangeHistoryView, getDocumentList
PCEHR_ERROR_5101	PCEHR not found	getIndividualDetailsView
PCEHR_ERROR_6001	No representatives found	getRepresentativeList
PCEHR_ERROR_6002	Invalid observation type	getView (Observation View)
PCEHR_ERROR_6003	Invalid document source	getView (Observation View)

For Common Header Status codes and descriptions, please refer to *PCEHR Document Exchange using the IHE XDS.b Platform Technical Service Specification* [PCEHR-DE-TSS] and ATS 5820-2010.

4.2 PCEHR views

This section describes different request and response data for the PCEHR views provided by the getView web service. The subsections outline the request parameters and response data for the different views.

4.2.1 Prescription and Dispense View

The parameters for the Prescription and Dispense View getView request are given in Table 19.

Table 19 – prescriptionAndDispenseView parameters

Element Name	Type	Cardinality	Remarks
prescriptionAndDispenseView		**1..1**	
versionNumber	String	1..1	Version number of the view corresponding to the namespace version.
fromDate	Date	1..1	Filter the view by start date value. Prescription or dispense clinical event date (serviceStopTime).
toDate	Date	1..1	Filter the view by end date value. Prescription or dispense clinical event date (serviceStopTime).
/ prescriptionAndDispenseView			

Please refer to Appendix A for the Prescription and Dispense View XDS schema.

This view data is returned as a CDA package.

For specific details of the view's data element returned in the getView response, also refer to the clinical document specifications defined for Prescription and Dispense View [PCEHR-PDV].

4.2.2 Observation View

The parameters for the Observation View getView request are given in Table 20.

Table 20 – observationView parameters

Element Name	Type	Cardinality	Remarks
observationView		**1..1**	
versionNumber	String	1..1	Version number of the view corresponding to the namespace version
fromDate	Date	1..1	Filter the view by start date value
toDate	Date	1..1	Filter the view by end date value
observationType	String	1..1	Values: 'HEADCIRCUMFERENCE', 'HEIGHT', 'WEIGHT', 'BMI'
documentSource	String	1..1	Values: 'PROVIDER', 'PERSONAL', 'ALL'
referenceData	String	1..1	Simple element reference data 'WHO' or 'CDC'
/ observationView			

Please refer to Appendix A for the Observation View XDS schema.

This view data is returned as a CDA package.

For specific details of the view data element returned in the getView response, please refer to the clinical document specifications for the Observation View.

4.2.3 Health Check Schedule View

The parameters for the Health Check Schedule View getView request are given in Table 21.

Table 21 – healthCheckScheduleView parameters

Element Name	Type	Cardinality	Remarks
healthCheckScheduleView		**1..1**	
versionNumber	String	1..1	Version number of the view corresponding to the namespace version
jurisdiction	String	1..1	Individual state's health check schedule. Enumerations: 'NSW', 'QLD', 'ACT', 'NT', "VIC", 'WA', 'TAS' and 'SA'
/ healthCheckScheduleView			

Please refer to Appendix A for the Health Check Schedule View XDS schema.

This view data is returned as a CDA package.

For specific details of the view data element returned in the getView response, please refer to the clinical document specifications for the Health Check Schedule View.

4.2.4 Medicare Overview

The parameters for the Medicare Overview getView request parameters are given in Table 22.

Table 22 – Medicare Overview parameters

Element Name	Type	Cardinality	Remarks
medicareOverview		**1..1**	
versionNumber	String	1..1	Version number of the view corresponding to the namespace version. Two versions are available: Version **1.0** EXCLUDES document links in the narrative; Version **1.1** INCLUDES document links in the narrative,
fromDate	Date	1..1	Filter the view by start date value for PBS/MBS service items
toDate	Date	1..1	Filter the view by end date value for PBS/MBS service items
/ medicareOverview			

Informative note

The information from the Australian Childhood Immunisation Register (ACIR) and Australian Organ Donor Register (AODR) will not have date range filtering applied in the view.

Please refer to Appendix A for the Medicare Overview XDS schema.

This view data is returned as a CDA package. For specific details of the view data element returned in the getView response, please refer to the specifications defined for Medicare Overview.

4.2.5 Pathology Report View

4.2.5.1 Request

The parameters for the Pathology Report View getView request parameters are given in Table 23.

Table 23 – pathologyReportView parameters

Element Name	Type	Cardinality	Remarks
pathologyReportView		**1..1**	
versionNumber	String	1..1	Version number of the view corresponding to the namespace version
fromDate	Date	1..1	Filter the view by start date value for the Pathology Report items based on the Specimen Collection Date
toDate	Date	1..1	Filter the view by end date value for Pathology Report items based on the Specimen Collection Date.
/ pathologyReportView			

Informative note

Please refer to Appendix A for the Pathology Report View XDS schema.

This view data is returned as a XML document which is Base64 encoded in the response object.

4.2.5.2 Response

Please refer to Appendix A for the Pathology Report View Response XDS schema.

The data returned from in the Pathology Report View getView payload is provided in Table 24.

Table 24 – pathologyReportViewResponse Data

Element Name	Type	Cardinality	Remarks
pathologyReportViewResponse		**1..1**	
viewMetadata		**1..1**	
individualProfile		**1..1**	
ihiNumber	ihiNumber	**1..1**	A 16-digit string representing the individual's IHI
individual	individualTypeSupp	**1..1**	The individual who is the subject of this view payload
/ individualProfile			
viewParameters		**1..1**	

Element Name	Type	Cardinality	Remarks
dateFromFilter	date	**1..1**	The Date to Filter by Start Date which was passed by the parameter to the getView Service
dateToFilter	date	**1..1**	The Date to Filter by End Date which was passed by the parameter to the getView Service
viewVersionNumber	string	**1..1**	The version of the View Service which was returned in the View Response
/ viewParameters			
informationAvailable	boolean	**1..1**	Indicates whether any Pathology Reports are available within the provided parameters
/viewMetadata			
pathologyReport		**0..***	
dateAvailableToConsumer	string	**1..1**	The date on which the Pathology Report will be available to the consumer. (If this date is in the past, then the report is already available to the consumer.) Note: If this report is superseded, than the dateAvailableToConsumer will also be superseded. See Appendix C.2 for more information regarding date and time formats.
reportInformation	pathologyReportInformationDT	**1..1**	Report information such as a dates, status, document Identifiers. See pathologyReportInformationDT and the *Pathology Report Structured Content Specification* [PATH-SCS] for further detail.
clinicalDocumentAuthor	providerInformationDT	**1..1**	The details of the author of the clinical document. See providerInformationDT
reportingPathologistInformation	providerInformationDT	**1..1**	Pathologist who is responsible for the pathology test result.
testRequesterInformation	requesterInformationDT	**1..1**	Party that arranges provision of a service.
pathologyTestResult		**1..***	

Element Name	Type	Cardinality	Remarks
specimenCollectionDate	string	**1..1**	See the *Pathology Report Structured Content Specification* for further detail. See Appendix C.2 for more information regarding date and time formats.
pathologyDiscipline	CodedType	**1..1**	See the *Pathology Report Structured Content Specification* for further detail.
testResultName	CodedType	**1..1**	See the *Pathology Report Structured Content Specification* for further detail.
overallTestResultStatus	CodedType	**1..1**	See the *Pathology Report Structured Content Specification* for further detail Also note that this element is being shortened as described in the informative note below and in Table 25
/ pathologyTestResult			
/ pathologyReport			
/ pathologyReportViewResponse			

Informative note

This view data is returned as an XML document which is base64 encoded in the response object.

The Pathology Report View shortens the displayName for the overallTestResultStatus value. See Table 25 for details on how the HL7 0123 table is being shortened in the View Service.

Table 25 – View Service HL7 0123 Table displayName shorting

displayName as it appears in the document	Code	codeSystem Name	codeSystem	Shortened Displayname for view
Correction to results	C	HL7 result Status	2.16.840.1.113883.12.123	Corrected
Final results; results stored and verified. Can only be changed with a corrected result.	F	HL7 result Status	2.16.840.1.113883.12.123	Final
Preliminary: A verified early result is available, final results not yet obtained.	P	HL7 result Status	2.16.840.1.113883.12.123	Preliminary

4.2.6 Diagnostic Imaging Report View

4.2.6.1 Request

The parameters for the Diagnostic Imaging Report View getView request parameters are given in Table 26.

Table 26 – diagnosticImagingReportView parameters

Element Name	Type	Cardinality	Remarks
diagnosticImagingReportView		**1..1**	
versionNumber	String	1..1	Version number of the view corresponding to the namespace version
fromDate	Date	1..1	Filter the view by start date value for the Diagnostic Imaging Report items based on imaging date.
toDate	Date	1..1	Filter the view by end date value for Diagnostic Imaging Report items based on imaging date.
/ diagnosticImagingReportView			

Informative note

Please refer to Appendix A for the Diagnostic Imaging Report View XDS schema.

This view data is returned as an XML document which is base64 encoded in the response object.

4.2.6.2 Response

The data returned from in the Diagnostic Imaging Report View getView payload is provided in Table 27.

Table 27 – diagnosticImagingReportViewResponse data

Element Name	Type	Cardinality	Remarks
diagnosticImagingReportViewResponse		**1..1**	
viewMetadata		**1..1**	
individualProfile		**1..1**	
ihiNumber	ihiNumber	**1..1**	A 16-digit string representing the individual's IHI.
individual	individualTypeSupp	**1..1**	The individual who is the subject of this view payload.
/ individualProfile			
viewParameters		**1..1**	
dateFromFilter	date	**1..1**	The Date to Filter by Start Date which was passed by the parameter to the getView Service.
dateToFilter	date	**1..1**	The Date to Filter by End Date which was passed by the parameter to the getView Service.
viewVersionNumber	string	**1..1**	The version of the View Service which was returned in the View Response.
/ viewParameters			
informationAvailable	boolean	**1..1**	Indicates whether any diagnostic imaging reports are available within the provided parameters
/viewMetadata			
diagnosticImagingReport		**0..***	

Element Name	Type	Cardinality	Remarks
dateAvailableToConsumer	string	**1..1**	The on date which the Diagnostic Imaging Report will be available to the consumer. (If this date is in the past, then the report is already available to the consumer.) Note: If this report is superseded, than the dateAvailableToConsumer will also be superseded.
reportInformation	diagnosticReportInformationDT	**1..1**	Report information such as dates, status, document identifiers. See diagnosticReportInformationDT and the *Diagnostic Imaging Report Structured Content Specification* [DIAG-SCS] for further detail.
clinicalDocumentAuthor	providerInformationDT	**1..1**	The details of the author of the clinical document. See providerInformationDT
reportingRadiologistInformation	providerInformationDT	**1..1**	Radiologist who is responsible for the report.
imagingRequesterInformation	requesterInformationDT	**1..1**	Party that arranges provision of a service.
imagingExaminationResult		**1..***	
imagingServiceDateTime	string	**1..1**	See the *Diagnostic Imaging Report Structured Content Specification* [DIAG-SCS] for further detail See Appendic C.2 for more information regarding date and time formats
examinationResultName	CodedType	**1..1**	See the *Diagnostic Imaging Report Structured Content Specification* for further detail
modality	CodedType	**1..1**	See the *Diagnostic Imaging Report Structured Content Specification* for further detail
anatomicalSiteDetails		**0..***	
anatomicalRegion	CodedType	**0..1**	See the *Diagnostic Imaging Report Structured Content Specification* for further detail
anatomicalLocation		**0..***	

Element Name	Type	Cardinality	Remarks
anatomicalLocationName	CodedType	**0..1**	See the *Diagnostic Imaging Report Structured Content Specification* for further detail
laterality	CodedType	**0..1**	See the *Diagnostic Imaging Report Structured Content Specification* for further detail
/ anatomicalLocation			
/ anatomicalSiteDetails			
overallTestResultStatus	CodedType	**0..1**	See the *Diagnostic Imaging Report Structured Content Specification* for further detail
imageLocationInformation	String	**0..1**	See the *Diagnostic Imaging Report Structured Content Specification* for further detail
/ imagingExaminationResult			
/ diagnosticImagingReport			
/ diagnosticImagingReportViewResponse			

Informative note

Please refer to Appendix A for the Diagnostic Imaging Report View Result XDS schema.

This view data is returned as a XML document which is base64 encoded in the response object.

4.2.7 Health Record Overview

4.2.7.1 Request

The parameters for the Health Record Overview getView request parameters are given in Table 28.

Table 28 – healthRecordOverview parameters

Element Name	Type	Cardinality	Remarks
healthRecordOverview		**1..1**	
versionNumber	String	**1..1**	Version number of the view corresponding to the namespace version
clinicalSynopsisLength	Int	**1..1**	Specifies the character length of the Clinical Synopsis that is to be returned. If '0' is supplied the full clinical synopsis will be returned.
/ healthRecordOverview			

Informative note

Please refer to Appendix A for the Health Record Overview XDS schema.

This view data is returned as a XML document which is Base64 encoded in the response object.

4.2.7.2 Response

The data returned from in the Health Record Overview getView payload is provided in Table 29.

Table 29 – healthRecordOverview Data

Element Name	Type	Card-inality	Remarks
healthRecordOverviewResponse		**1..1**	
viewMetadata		**1..1**	
individualProfile		**1..1**	
ihiNumber	ihiNumber	**1..1**	A 16-digit string representing the individual's IHI
individual	individualTypeSupp	**1..1**	The individual who is the subject of this view payload

Element Name	Type	Card-inality	Remarks
indigenousStatus	String	**0..1**	Will return a single integer in the string which represents the following: • "1" - Aboriginal but not Torres Strait Islander origin • "2" - Torres Strait Islander but not Aboriginal origin • "3" - Both Aboriginal and Torres Strait Islander origin • "4" - Neither Aboriginal nor Torres Strait Islander origin • "9" - indigenous status not stated/inadequately described
veteranAndADFStatus	String	**0..1**	Will return a single integer in the string which represents the following: • "1" – Never an Australian Defence Force (ADF) member • "2" - Current or former serving ADF member who is a Department of Veterans' Affairs (DVA) client • "3" – Current or former serving ADF member who is not a DVA client • "9" – Veteran status not stated/inadequately described
/ individualProfile			
viewParameters		**1..1**	
clinicalSynopsisLength	int	**1..1**	The Length of the Clinical Synopsis.
viewVersionNumber	String	**1..1**	The version of the View Service that was returned in the View Response.
/ viewParameters			
/viewMetadata			
newDocuments		**1..1**	
informationAvailable	boolean	**1..1**	Indicates whether any new documents are available. If this is set to false, there will be no document elements below.
document	document DT	**0..***	Data regarding the new document
/ newDocuments			
sharedHealthSummary		**1..1**	
informationAvailable	boolean	**1..1**	Indicates whether a shared health summary is available. If this is set to false, there will be no document elements below.
sharedHealthSummaryAtomicData		**0..1**	

Element Name	Type	Card-inality	Remarks
documentDate	String	**1..1**	See the Shared Health Summary - Structured Content Specification [SHS-SCS] See Appendix C.2 for more information regarding date and time formats.
cdaDocumentTitle	String	**1..1**	See the *Shared Health Summary - Structured Content Specification*
shsAuthorName	nameTypeSupp	**1..1**	See the *Shared Health Summary - Structured Content Specification*
shsAuthorId	String	**1..1**	See the *Shared Health Summary - Structured Content Specification*
shsAuthorDesignation	CodedType	**1..1**	See the *Shared Health Summary - Structured Content Specification*
shsAuthorOrgName	String	**1..1**	See the *Shared Health Summary - Structured Content Specification*
shsAuthorOrgId	String	**1..1**	See the *Shared Health Summary - Structured Content Specification*
shsAuthorAddress	addressTypeDT	**0..1**	See the *Shared Health Summary - Structured Content Specification*
shsAuthorContactDetails	contactDetailsDT	**0..***	See the *Shared Health Summary - Structured Content Specification*
medicinesList		**1..1**	
informationAvailable	informationAvailableDT	**1..1**	See the *Shared Health Summary - Structured Content Specification*
medicine		**0..***	
medicineTitle	CodedType	**1..1**	See the *Shared Health Summary - Structured Content Specification*
medicineDose	String	**1..1**	See the *Shared Health Summary - Structured Content Specification*
medicineDesc		**0..***	
indication	String	**0..1**	See the *Shared Health Summary - Structured Content Specification*
comment	String	**0..1**	See the *Shared Health Summary - Structured Content Specification*
/ medicineDesc			
/ medicine			
/ medicinesList			
advReactionsList		**1..1**	

Element Name	Type	Card-inality	Remarks
informationAvailable	informationAvailableDT	**1..1**	Indicates whether an adverse reaction list is available. If this is set to false there will be no document elements below.
advReaction		**0..***	
advReactionCause	CodedType	**1..1**	See the *Shared Health Summary - Structured Content Specification*
advReactionManifestation	CodedType	**0..***	See the *Shared Health Summary - Structured Content Specification*
/ advReaction			
/ advReactionsList			
immunisationList		**1..1**	
informationAvailable	informationAvailableDT	**1..1**	Indicates whether an immunisation list is available. If this is set to false there will be no document elements below.
immunisation		**0..***	
immunisationDate	timeStampDT	**1..1**	See the *Shared Health Summary - Structured Content Specification*
immunisationTitle	CodedType	**1..1**	See the *Shared Health Summary - Structured Content Specification*
immunisationSequenceNumber	int	**0..1**	See the *Shared Health Summary - Structured Content Specification*
/ immunisation			
/ immunisationList			
medHistoryList		**1..1**	
informationAvailable	informationAvailableDT	**3..3**	Indicates whether a medicine history list is available. If this is set to false there will be no document elements below.
problemAndDiagnosis		**0..***	
medTitle	CodedType	**1..1**	See the *Shared Health Summary - Structured Content Specification*
medDateO	timeStampDT	**0..1**	See the *Shared Health Summary - Structured Content Specification*
medDateR	timeStampDT	**0..1**	See the *Shared Health Summary - Structured Content Specification*
medComment	string	**0..1**	See the *Shared Health Summary - Structured Content Specification*
/ problemAndDiagnosis			
procedure		**0..***	
medTitle	CodedType	**1..1**	See the *Shared Health Summary -*

Element Name	Type	Card-inality	Remarks
			Structured Content Specification
medDateO	timeStampDT	**0..1**	See the *Shared Health Summary - Structured Content Specification*
medDateR	timeStampDT	**0..1**	See the *Shared Health Summary - Structured Content Specification*
medComment	string	**0..1**	See the *Shared Health Summary - Structured Content Specification*
/ procedure			
otherMedicalHistory		**0..***	
medTitle	CodedType	**1..1**	See the *Shared Health Summary - Structured Content Specification*
medDateO	timeStampDT	**0..1**	See the *Shared Health Summary - Structured Content Specification*
medDateR	timeStampDT	**0..1**	See the *Shared Health Summary - Structured Content Specification*
medComment	string	**0..1**	See the *Shared Health Summary - Structured Content Specification*
/ otherMedicalHistory			
/ medHistoryList			
/sharedHealthSummary AtomicData			
/ sharedHealthSummary			
otherLinks		**1..1**	This section contains other Views and Documents relating to a patient's eHealth Record. At the time of publication this will include the following Views and Documents (Subject to availablitly): • Medicare Overview • Diagnostic Imaging View • Pathology Index View • Health Check Assessment View • Prescription and Dispense View • Personal Health Summary (Shared Health Summary) • Advance Care Directive As new views and documents become supported by the PCEHR System, these items may appear as additional links in this list. Connecting systems must gracefully ignore any links which have not been implemented.
link		**1..***	

Element Name	Type	Card-inality	Remarks
linkName	string	**1..1**	The following linkNames are supported: • MedicareOverview • DiagnosticImagingView • PathologyIndexView • HealthCheckAssessmentView • PrescriptionAndDispenseView • PersonalHealthSummary • AdvanceCareDirective
linkTitle	string	**1..1**	The following titles are supported: • Medicare Overview • Diagnostic Imaging View • Pathology Index View • Health Check Assessment View • Prescription and Dispense View • Personal Health Summary • Advance Care Directive
linkTarget	anyURI	**0..1**	The links to the View or Document. If the link is to a Document (Personal Health Summary, Advance Care Directice) this will be in the PCEHR document link format. If the link is a view, then this link target is the name of the view (as provided linkName)
informationAvailable	boolean	**1..1**	An indicator whether any information is available in the provided link.
linkType	string enumeration("Document", "View")	**1..1**	Links may refer to either a document or view.
/ link			
/ otherLinks		**1..1**	
recentDocuments		**1..1**	
informationAvailable	boolean	**1..1**	Indicates whether any recent documents are available. If this is set to false there will be no document elements below.
document	document DT	**0..***	Data and metadata regarding the document.
/ recentDocuments			
/ healthRecordOverviewResponse			

Informative note

Please refer to Appendix A for the Health Record Overview Result XDS schema.

This view data is returned as an XML document which is base64 encoded in the response object.

The format for [XDSDocumentEntry.uniqueId] is described in conformance point DEXS-T 56 in the *PCEHR Document Exchange Technical Service Specification*.

5 Engineering viewpoint

The engineering viewpoint includes definitions of mechanisms and functions to support distributed interactions between computational objects as a series of templates (i.e. patterns) for computational interactions. These, in turn, are parameterised to support a range of different policies defined in the enterprise, information or computational specifications.

5.1 Discovery services

The location of the services exposed by the PCEHR system will be shared between parties before interaction. Dynamic discovery mechanisms will not be provided.

Appendix A XSD and WSDL

A.1 View Service schemas

The following XML schema defines the XSD for IHI ITI-58 Registry Store Query messages. The query.xsd can be found in the XDS.b -supporting material [XDS.b SM] (/schema/ebRS).

Table 30 below provides the name and description of the XML schema relevant for this specification. The schemas (XSD files) are published in NEHTA's *PCEHR B2B Client Library - Schema WSDL* v2.0.0 [PCEHR-B2B-LIB].

Table 30 – View XML Schemas

XML schema	Schema description
PCEHR_GetChangeHistoryView.xsd	Defines the data type for getChangeHistoryView operation.
PCEHR_GetView.xsd	Defines the data type for getView operation.
PCEHR_GetAuditView.xsd	Defines the data type for getAuditView operation.
PCEHR_CommonTypes.xsd	Defines the XSD for common data associated with all the WSDLs interface.
PCEHR_GetRepresentativeList.xsd	Defines the data type for the getRepresentativeList
PCEHR_GetIndividualDetailsView.xsd	Defines the data type for the GetIndividualDetailsView
PCEHR_PrescriptionAndDispenseView.xsd	Defines the data type for the PrescriptionAndDispense View
PCEHR_ObservationView.xsd	Defines the data type for the Observation View
PCEHR_HealthCheckScheduleView.xsd	Defines the data type for the HealthCheckSchedule View
PCEHR_MedicareOverview.xsd	Defines the data type for the MedicareOverview
PCEHR_PathologyReportView.xsd	Defines the data type for the PathologyReport View
PCEHR_PathologyReportView_Response.xsd	Defines the data type of the response from the PathologyReport View.
PCEHR_DiagnosticImagingReportView.xsd	Defines the data type for the PathologyReport View
PCEHR_DiagnosticImagingReportView_Response.xsd	Defines the data type of the response from the PathologyReport View.
PCEHR_HealthRecordOverview.xsd	Defines the data type for the HealthRecordOverview
PCEHR_HealthRecordOverview_Response.xsd	Defines the data type of the response from the HealthRecordOverview.

A.2 Web service interfaces

The following WSDLs specification defines the PCEHR View Service SOAP interface. They are published in NEHTA's *PCEHR B2B Client Library - Schema WSDL* v2.0.0 [PCEHR-B2B-LIB].

Table 31 – Web Service Interfaces

WSDL
B2B_GetViewInterface.wsdl
B2B_GetChangeHistoryViewInterface.wsdl
B2B_GetAuditViewInterface.wsdl
B2B_GetRepresentativeListInterface.wsdl
B2B_GetIndividualDetailsViewInterface.wsdl

A.3 TLS binding

The following WSDLs defines the binding based on the TLS Security Profile defined in ATS 5820—2010.

Table 32 – TLS Binding

WSDL
B2B_GetView.wsdl
B2B_GetChangeHistoryView.wsdl
B2B_GetAuditView.wsdl
B2B_GetRepresentativeList.wsdl
B2B_GetIndividualDetailsView.wsdl

Appendix B Common types

B.1 CodedType

Element Name	Type	Cardinality	Remarks
CodedType	**Complex**	**1..1**	
displayName	String	0..1	See the *Data Types Abstract Specification* from CDA Release 2.0 [HL7-CDA]
originalText	String	0..1	See the *Data Types Abstract Specification* from CDA Release 2.0
code	String	0..1	See the *Data Types Abstract Specification* from CDA Release 2.0
codeSystem	String	0..1	See the *Data Types Abstract Specification* from CDA Release 2.0
codeSystemName	String	0..1	See the *Data Types Abstract Specification* from CDA Release 2.0
codeSystemVersion	String	0..1	See the *Data Types Abstract Specification* from CDA Release 2.0
/ CodedType			

B.2 informationAvailableDT

Element Name	Type	Cardinality	Remarks
informationAvailableDT	**Extends CodedType**	**1..1**	Adds two attributes to the CodedType.element. To indicate whether the contents of the element is information or an exclusion statement.
value	Attribute: Boolean	1..1	If returned as true, the element will contain information. If returned a false, then the element will contain an exclusion statement.
flavor	Attribute: String ("Other", "Problem", "Procedure")	1..1	Stating whether the CodedType is relating to "other" (in the context of Medicines List, Adverse Reaction List, Medical History List, Immunisations List) or "Problem or "Procedure" in context of Medical History List.
/ informationAvailableDT			

B.3 addressTypeDT

Element Name	Type	Cardinality	Remarks
addressTypeDT	**Complex**	**1..1**	
streetAddressLine	String	0..1	See the *Participation Data Specification* [PAR-DS]
country	String	0..1	See the *Participation Data Specification*
unitType	String	0..1	See the *Participation Data Specification*
unitID	String	0..1	See the *Participation Data Specification*
additionalLocator	String	0..*	See the *Participation Data Specification*
streetName	String	0..1	See the *Participation Data Specification*
houseNumber	String	0..1	See the *Participation Data Specification*
usage	String	0..1	See the *Participation Data Specification*
streetNameType	String	0..1	See the *Participation Data Specification*
direction	String	0..1	See the *Participation Data Specification*
deliveryAddressLine	String	0..*	See the *Participation Data Specification*
city	String	0..1	See the *Participation Data Specification*
state	String	0..1	See the *Participation Data Specification*
postalCode	String	0..1	See the *Participation Data Specification*
/ addressTypeDT			

B.4 contactDetailsDT

Element Name	Type	Cardinality	Remarks
contactDetailsDT	**Complex**	**1..1**	
use	String ("WP", "H", "HP", "HV", "AS", "EC", "MC", "PG")	1..1	• Workplace • Home • Primary Home • Vacation Home • Answering Service • Emergency Contact • Mobile Contact • Pager
value	anyURI	1..1	Communication Details URI
/ contactDetailsDT			

B.5 timeStampDT

Element Name	Type	Cardinality	Remarks
timeStampDT	**Complex**	**1..1**	
value	dateTime	0..1	See the *XML Implementation Technology Specification - Data Types* from the CDA Release 2.0 [HL7-CDA]
low	dateTime	0..1	See the *XML Implementation Technology Specification - Data Types* from the CDA Release 2.0
high	dateTime	0..1	See the *XML Implementation Technology Specification - Data Types* from the CDA Release 2.0
width	dateTime	0..1	See the *XML Implementation Technology Specification - Data Types* from the CDA Release 2.0
center	dateTime	0..1	See the *XML Implementation Technology Specification - Data Types* from the CDA Release 2.0
/ timeStampDT			

B.6 documentDT

Element Name	Type	Cardinality	Remarks
documentDT	**None**	**1..1**	
effectiveDateTime	dateTime	1..1	See the CDA R-MIM ClinicalDocument.effectiveTime Section from CDA Release 2.0 [HL7-CDA]
documentLink	anyURI	1..1	A PCEHR document link format to the document
documentTypeName	String	1..1	The Type Name of the Document.
documentTypeCode	CodedType	1..1	The Type Code of the Document
documentAuthorPersonName	nameTypeSupp	1..1	The Name of the Person Author.
documentAuthorPersonIdentifier	String	1..1	The identifier of the Person Author.
documentAuthorRole	String	1..1	The Role of the Author.
documentAuthorOrganisationName	String	1..1	The Organisation Name.
documentAuthorOrganisationIdentifier	String	1..1	The Organisation's HPI-O.
clinicalSynopsis	String	0..1	The Clinical Synopsis from the document.
/ documentDT			

B.7 nameTypeDT

Element Name	Type	Cardinality	Remarks
nameTypeDT		**1..1**	
nameTitle	String	0..*	See the *Participation Data Specification* [PAR-DS]
familyName	String	1..1	See the *Participation Data Specification*
givenName	String	0..*	See the *Participation Data Specification*
nameSuffix	String	0..*	See the *Participation Data Specification*
usage	Usage ("M", "N", "O", "B", "L", "R")	0..1	• Maiden Name (Name at birth) • Newborn Name • Other Name (Alias) • Professional or Business Name • Registered Name (Legal Name) • Reporting Name See the Participation Data Specification for further details.
/ nameTypeDT			

B.8 pathologyReportInformationDT

Element Name	Type	Cardinality	Remarks
pathologyReportInformationDT		**1..1**	
CDAeffectiveTime	String	1..1	See the *Pathology Report Structured Content Specification* [PATH-SCS] and *Pathology Report CDA Implementation Guide* [PATH-CDA]
dateTimeReportAuthored	String	1..1	See the *Pathology Report Structured Content Specification* and *Pathology Report CDA Implementation Guide*
dateTimeAuthorisation	String	1..1	See the *Pathology Report Structured Content Specification* and *Pathology Report CDA Implementation Guide*
pathologistLocalReportId	String	1..1	See the *Pathology Report Structured Content Specification* and *Pathology Report CDA Implementation Guide*
reportName	String	1..1	See the *Pathology Report Structured Content Specification* and *Pathology Report CDA Implementation Guide*

Element Name	Type	Cardinality	Remarks
reportStatus	CodedType	1..1	See the *Pathology Report Structured Content Specification* and *Pathology Report CDA Implementation Guide*
documentId	String	1..1	See the *Pathology Report Structured Content Specification* and *Pathology Report CDA Implementation Guide*
documentLink	anyURI	1..1	See the *Pathology Report Structured Content Specification* and *Pathology Report CDA Implementation Guide*
/ pathologyReportInformationDT			

B.9 diagnosticReportInformationDT

Element Name	Type	Cardinality	Remarks
diagnosticReportInformationDT		**1..1**	
CDAeffectiveTime	String	1..1	See the *Diagnostic Imaging Report Structured Content Specification* [DIAG-SCS] and *Diagnostic Imaging Report CDA Implementation Guide* [DIAG-CDA]
dateTimeReportAuthored	String	1..1	See the *Diagnostic Imaging Structured Content Specification* and *Diagnostic Imaging Reoprt CDA Implementation Guide*
dateTimeAuthorisation	String	1..1	See the *Diagnostic Imaging Structured Content Specification* and *Diagnostic Imaging Reoprt CDA Implementation Guide*
accessionNumber	String	1..1	See the *Diagnostic Imaging Structured Content Specification* and *Diagnostic Imaging Reoprt CDA Implementation Guide*
reportDescription	String	1..1	See the *Diagnostic Imaging Structured Content Specification* and *Diagnostic Imaging Reoprt CDA Implementation Guide*
reportStatus	CodedType	1..1	See the *Diagnostic Imaging Structured Content Specification* and *Diagnostic Imaging Reoprt CDA Implementation Guide*
documentId	String	1..1	See the *Diagnostic Imaging Structured Content Specification* and *Diagnostic Imaging Reoprt CDA Implementation Guide*
documentLink	anyURI	1..1	See the *Diagnostic Imaging Structured Content Specification* and *Diagnostic Imaging Reoprt CDA Implementation Guide*
/ diagnosticReportInformationDT			

B.10 requesterInformationDT

Element Name	Type	Cardinality	Remarks
requesterInformationDT		**1..1**	
testRequestId	String	0..1	The Test Request Identifier.
dateTimeRequested	String	1..1	The Date and Time that the request was made. (Note: Time may not always be available.)
providerOrganisationName	String	0..1	The Requesting Organisation's Name.
providerOrganisationIdentifier	String	0..1	The Requesting Organisation's HPI-O.
providerName	nameTypeDT	1..1	The Requesting Healthcare Provider's Name.
providerIdentifier	String	0..1	The Requesting Healthcare Provider's Identifier.
/requesterInformationDT			

B.11 providerInformationDT

Element Name	Type	Cardinality	Remarks
providerInformationDT		**1..1**	
healthcareProviderOrganisationName	String	1..1	The healthcare provider's organisation name
healthcareProviderOrganisationIdentifier	String	1..1	Minimum Length = 16 Maximum length = 6
healthcareProviderName	nameTypeDT	1..1	The healthcare provider's name
healthcareProviderIdentifier	String	0..1	The healthcare provider's unique identifier
healthcareProviderRole	String	0..1	The healthcare provider's role
/ providerInformationDT			

B.12 individualTypeSupp

Element Name	Type	Cardinality	Remarks
individualTypeSupp		**1..1**	
name	nameTypeSupp	1..1	Individual's name
sex	String	1..1	See element in Common Types schema, which is referenced in Appendix A.
dateOfBirth	Date	1..1	The individual's date of birth
/ individualTypeSupp			

Appendix C PCEHR formats

C.1 PCEHR document link format

A document link is denoted by a URI of the following format:

```
pcehr:1.2.36.1.2001.1007.10.[PAI-R]/[doc-id]
```

Where PAI-R is a PCEHR Assigned Identifier for a Repository and doc-id is the identifier of a clinical document stored within the repository. The PAI-R may identify the PCEHR Repository or it may identify a Registered Repository.

The format for [doc-id] is "[root]^[extension]" when an extension is present, otherwise it is "[root]", as shown by the following mappings:

Example 1 if doc-id is `013d5c25-1682-45bc-8984-ce0773df9a0d` then document id is represented as:

```
<id root="013d5c25-1682-45bc-8984-ce0773df9a0d"/>
```

Example 2 if doc-id is `2.25.295835386144617648525177275513132113508` then document id is represented as:

```
<id root="2.25.295835386144617648525177275513132113508"/>
```

Example 3 If doc-id is `2.25.295835386144617648525177275513132113508^1` then document id is represented as:

```
<id root="2.25.295835386144617648525177275513132113508" extension="1"/>
```

C.2 Date format

The PCEHR returns most dates as a UTC formatted date (and optionally time) as a string.

Below are the possible formats:

- YYYY-MM-DD
- YYYY-MM-DDThh:mm
- YYYY-MM-DDThh:mm:ss
- YYYY-MM-DDThh:mmTZD (With the TZD Fixed to 'Z' representing Zulu time)
- YYYY-MM-DDThh:mm:ssTZD (With the TZD Fixed 'Z' representing Zulu time)
- YYYY-MM-DDThh:mm:ss.sTZD (With the TZD Fixed 'Z' representing Zulu time)

Acronyms

Acronym	Description
CIS	clinical information system
CSP	contracted service provider
HI	Healthcare Identifiers
PCEHR	personally controlled electronic health record
SCS	structured content specification
WSDL	Web Service Definition Language
WSP	Web Service Profile – Commonly used to refer to the *ATS-5820 Web Service Profile* [ATS 5820-2010].
XDS	Cross-Enterprise Document Sharing (XDS.b) IHE Integration Profile as specified in [ITITF-1], Chapter 10 and extended by material relevant to XDS.b in [ITITF-2A], [ITITF-2B], [ITITF-2x], [ITITF-3].
XSD	XML schema definition

Glossary

The core set of terms used within the PCEHR are specified in the *PCEHR Glossary of Terms* [PCEHR-GLS]

Term	Meaning
NASH certificate	A NASH certificate is a digital certificate that is compliant with the NASH certificate policies.
service	A service encapsulates the collaboration which occurs between two or more parties to achieve a goal. Each participant in the service may offer multiple Service Interfaces.
service interface	A service interface is a logical grouping of operations which be offered by a participant within the context of a service.
service operation	A service operation is a specific function which supports communication between two participants.

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