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PCEHR Implementation Guide

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Final

National E-Health Transition Authority

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Document Information

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Table of Contents

Preface

Purpose

The intention of this document is to assist software developers to utilise the PCEHR B2B interface, produce well-formed B2B request messages, and receive and use responses from the system.

Audience

This document is intended primarily for the following roles within software developers and other e-health providers:

- Software developers
- System analysts
- Product managers

These roles, in the context of this document, belong to organisations such as:

- healthcare provider organisations with in-house software development capabilities
- Third party system and service providers
- Third party healthcare software vendors

The document assumes that readers are familiar with:

- PCEHR Concept of Operations
- Programming and its concepts
    - XML and XML-based standards, such as SOAP 1.2
    - Web Services and the Web Services Definition Language (WSDL)

Scope

In-scope items for this document are:

- A very brief and high-level introduction to the PCEHR System and the eHealth environment, including Health Identifiers
- References to relevant protocols and Technical Service Specifications
- Reference will be made to aspects of the Technical Services Specifications
- Sample XML messages (both requests and responses) for each B2B operation as well as coding tips
- Conformances will be quoted only when necessary.

Out-of-scope items are:

- User interfaces
- Any reference to the behaviour of integrated systems
- The architecture and security model of the PCEHR System
- A detailed discussion of CDA document structure

Related Documents

The document is part of the suite of documents made available to software developers. Its relationship to these other documents is depicted in the following diagram:

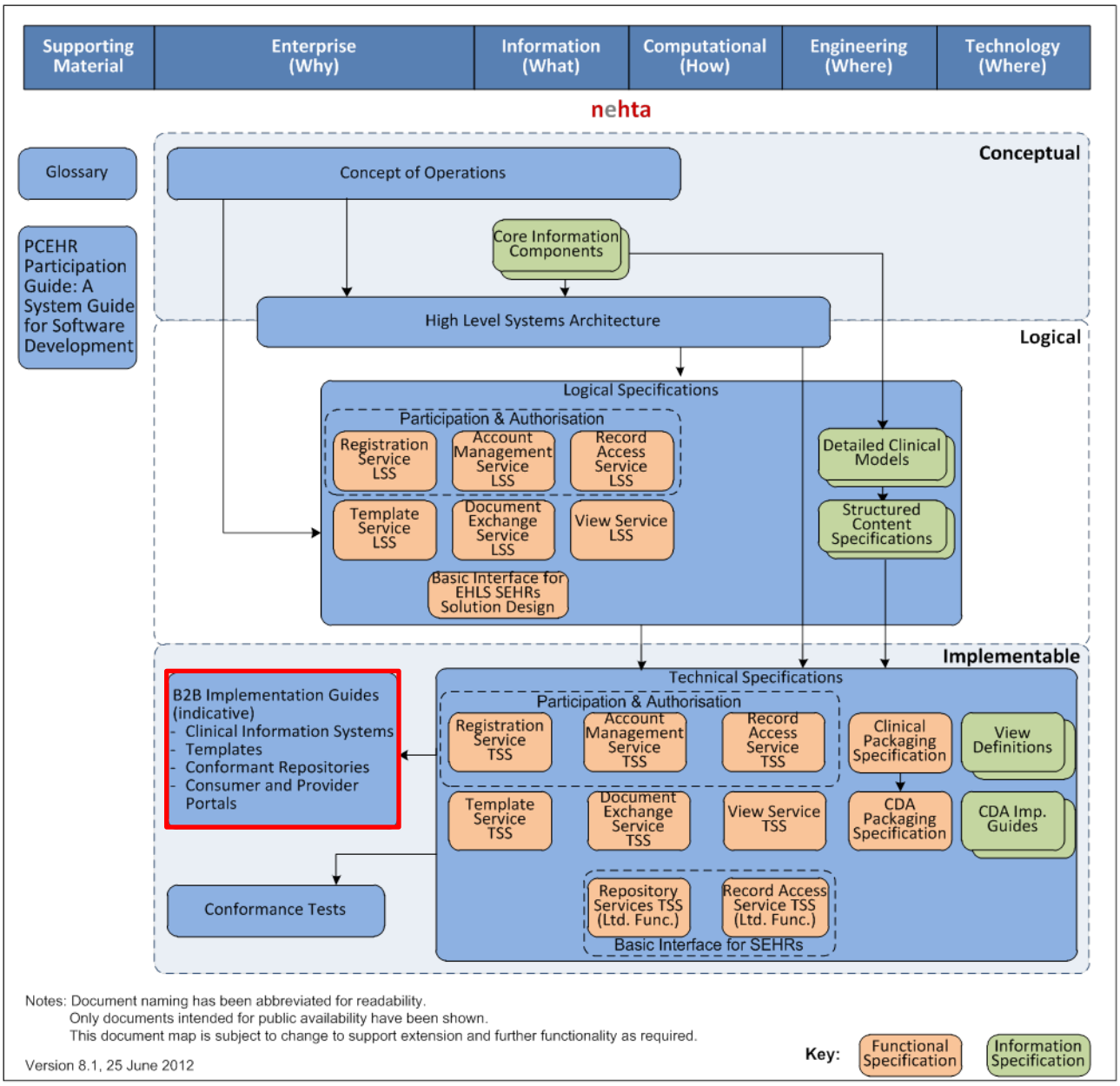

Figure 1: Document map of Software Developer Documents

The document also makes reference to the following resources to which reader ideally should have access:

- The PCEHR Welcome Pack
  which will be sent to the software developer organisation as an email attachment on successful completion of the application form, acceptance of the terms and conditions and sending in registration details.
- The PCEHR Technical Services Specifications (TSS)
  which are found on the Vendor Portal
  https://vendors.nehta.gov.au/
  The TSSs are in the *PCEHR Core System* tab's menu item *PCEHR B2B Gateway*.

https://vendors.nehta.gov.au/sections/myCompany/index.cfm?assetCategoryId=290#0

- The CDA specifications for the relevant documents which are found on the Vendor Portal, in the *Clinical Documents* tab's menu item *Common Specifications*. https://vendors.nehta.gov.au/sections/myCompany/index.cfm?assetCategoryId=335#0

Additional references are given in Appendix H.

Acronyms and Terminology

This document avoids unfamiliar acronyms and specialised terms as much as possible. However, where their use is unavoidable, the terms are explained in Appendix F.

Code Notation Conventions

Code is indicated by being enclosed in boxes:

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope">
```

The sample XML and MTOM messages given in the document are meant to be human-readable. The binaries and Base 64 packages have been considerably shortened or omitted altogether.

Deleted parts are indicated with a series of dots:

```
        <h:signature xmlns:h="http://ns.electronichealth.net.au/pcehr/
xsd/common/CommonCoreElements/1.0" xmlns="http://ns.electronichealth.n
et.au/pcehr/xsd/common/CommonCoreElements/1.0">
            ............
        </h:signature>
```

In a few places some code has been omitted altogether without any dots.

Code is coloured according to the following syntax scheme:

Table 1: XML message colour coding

xml Type	Colour
Open tag without referenced namespace	`<Classification`
Open tag with referenced namespace	`<s:Envelope`
Close tag, with or without referenced namespace	`</h:signature>`
Atribute	`xmlns=`
Attribute with referenced namespace	`xmlns:h=`
String	`"application/zip"`
URL	`http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0`
Special entities	`&`

1 Introduction

1.1 The PCEHR Concept

eHealth is important to the future of healthcare in Australia. For consumers and healthcare providers alike, it will enhance the way healthcare is delivered.

The Personally Controlled Electronic Health Record (PCEHR) System is the next step in using eHealth to enhance the healthcare system. The PCEHR System enables the secure sharing of health information between a consumer's healthcare providers and the consumer, while enabling the consumer to control who can access their PCEHR.

1.2 The Purpose of the PCEHR System

The PCEHR System will provide the necessary national infrastructure and standards-based specifications to enable secure access to a consumer's health information drawn from multiple sources.

Suppliers of eHealth systems will be provided with PCEHR design and technical specifications to help organisations enhance their products and services to become conformant with the relevant standards and specifications necessary for interaction with the PCEHR System.

1.3 Components of the PCEHR System

The national PCEHR System is distributed across a number of components. In the current rollout, these components are:

- The PCEHR Core System including the National Repository
- The Consumer Portal
- The Provider Portal
- The B2B Gateway

Other systems in the PCEHR eHealth eco system.

- DHS Medicare as Registered Repository
- The PCEHR compliant digital credential authentication service
- The Healthcare Identifier Service (HI)
- Template service

1.4 The B2B Interface

The B2B interface provides a secure and authenticated means to access the PCEHR System for a participant's system.

1.5 When can a product connect to the National PCEHR System?

To connect to the National PCEHR System a product must pass test cases in order to be issued a Notice of Connection (NOC). Then, the product will be tested against a mandated number of conformance points in order to be registered for Conformance, Compliance and Accreditation (CCA). The software is then authorised to connect to the PCEHR System. The complete product connection process is as follows:

Step 1: Software developer performs NOC tests,

Step 2: Software developer performs CCA tests,

Step 3: Software developer sends test reports and declarations to PCEHR System Operator,

Step 4: PCEHR System Operator grants the software developer access to the National PCEHR system.

2 Overview of Software Developer Products

2.1 Integration of a Third Party Product with the PCEHR System

This document does not address the design of the integrated product. This document is concerned with the interaction and behaviours between the software product interface and the PCEHR System at the B2B Gateway. These behaviours and interactions are built using the services described in the Logical Service Specifications (LSS) and the Technical Service Specifications (TSS) and are measured by adherence to conformance points (also found in the above documentation).

Access to the PCEHR System is via the B2B Gateway, which operates via requests made by the product and responses sent from the PCEHR System.

The prerequisites for beginning coding for PCEHR integration are:

- Healthcare Identifiers
  See section 3.1 These identifiers, one set for individual healthcare providers, another set for healthcare organisations, and the IHI number which is used by individual healthcare consumers, are issued by DHS Medicare.
- The PCEHR compliant digital credential, See section 3.2, is intended to be the primary authentication mechanism. The PCEHR compliant digital credential authentication service provides keys and certificates needed to access the B2B. However, a certificate issued by the Department of Human Services (Medicare Australia) may also be used as an alternative.

Every request has header information as described in section 4.4, and each header has a signature with the required keys, certificates and Healthcare Identifiers.

The full query and response messages, whose excerpts are given as samples in this document, are available in a zip file (PCEHR_Schemas-20120417_TSS_1.1) which is posted on this page

https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=223/

on the Vendor Portal.

2.2 Implementer Responsibilities

The responsibilities of implementers are to:

- Use the PCEHR B2B operations as these are intended to be used.
- Handle all error conditions appropriately, i.e. trap and process them.
- Validate data before submitting to the PCEHR System.
- Minimise the risk to the PCEHR System with the deployment of their software.
- Ensure implementation aligns with the PCEHR LSS and TSS documents.
- Ensure implementation aligns with the PCEHR CCA requirements.

3 Supporting Material

3.1 Healthcare Identifiers

Healthcare identifiers are unique identifiers issued by the Department of Human Services (DHS).They uniquely identify individual healthcare providers, healthcare provider organisations and individuals who seek healthcare, thereby giving confidence that the right health information is associated with the right individual at the point of care. Using these identifiers is a prerequisite for accessing individuals' health summaries from the PCEHR System.

Throughout this document, these identifiers are referred to as:

- IHI - Individual Healthcare Identifier
- HPI-I - Healthcare Provider Identifier—Individual
- HPI-O - Healthcare Provider Identifier—Organisation

References:

Web pages:

- Healthcare Identifiers for Individuals (http://www.ehealthinfo.gov.au/assets/Healthcare%20Identifiers%20Service%20for%20Consumers.pdf).
- Medicare web page: Healthcare Identifiers Service (http://www.medicareaustralia.gov.au/public/health-identifier/index.jsp).

3.1.1 Healthcare Provider Identifiers for Organisations

A Healthcare Provider Identifier—Organisation (HPI-O) is a 16-digit number allocated to organisations (such as a hospital or medical clinic) where healthcare is provided.

This HPI-O is used by the PCEHR System to identify and authenticate the healthcare provider organisation that accesses each PCEHR and its information. Access to PCEHR is based on the organisation.

References:

Web pages:

- Medicare web page: Healthcare Identifiers Service http://www.medicareaustralia.gov.au/public/health-identifier/index.jsp).
- Health Provider Identifier for Organisations (HPI-O) – Supplementary notes to help complete the application form2978.1202 (http://www.gpv.org.au/files/downloadable_files/Programs/IM-ICT/Howto%20-%20HPI-O%20Health%20Provider%20Identifier%20for%20Organisations%20v2.pdf)
- Medicare web page: For healthcare professionals (http://www.medicareaustralia.gov.au/provider/index.jsp)

3.1.2 Healthcare Provider Identifiers for Individual Practitioners

The Healthcare Provider Identifier – Individual (HPI-I) is a 16-digit number allocated to individual healthcare providers. To be eligible for an HPI-I, a healthcare provider must provide a "health service" as defined in the legislation.

There are two classes of individual healthcare providers who will be eligible for a HPI-I:

- Individual healthcare providers registered under a state or territory law which relates to the registration of a particular healthcare profession or individual healthcare providers registered under the national law with AHPRA
- Individual healthcare providers who are members of a professional association that meets certain criteria set out under legislation

The HPI-I is used in the PCEHR System to, for example, identify the author of a CDA document.

References:

Web pages;

- From DOHA: Healthcare Identifiers Service – Frequently Asked Questions (http://health.gov.au/internet/main/publishing.nsf/Content/pacd-ehealth-consultation-faqs)
- From Medicare: Healthcare Identifiers Service -- Application to create, verify or merge an Individual Healthcare Identifier (http://www.medicareaustralia.gov.au/provider/health-identifier/files/create-verify-or-merge-individuali-healthcare-identifier.pdf)

3.2 Digital Certificates

The PCEHR compliant digital credential is a nationwide secure and authenticated service for healthcare organisations and personnel to exchange eHealth information.

The PCEHR compliant digital credential addresses the need to ensure that eHealth transactions are private, traceable and conducted only by known entities. The service is Gatekeeper accredited – it will issue digital credentials, including digital certificates managed through the Public Key Infrastructure and secured by tokens such as smartcards. These credentials will assert identity when used to access eHealth systems (including the PCEHR System) that are enabled to use PCEHR compliant digital credential authentication. All PCEHR System Participants must be authenticated to the system. This includes healthcare provider organisations, contracted service providers, registered repositories and registered portals.

Reference:

Web Page:

http://www.medicareaustralia.gov.au/provider/vendors/pki/index.jsp#N100E6

3.3 XDS.b

XDS.b is a specification for sharing documents between healthcare organisations, individual providers and the PCEHR System.

PCEHR Document Exchange Service - Logical Service Specification

PCEHR Document Exchange Service, Using the IHE XDS.b Platform - Technical Service Specification

Reference:

https://vendors.nehta.gov.au (under "PCEHR Core System" then "PCEHR B2B Gateway")

3.4 Clinical Document Architecture (CDA) Packaging

The packaging specification provides eHealth software developers with information on mechamisms for encapsulating CDA documents for delivery. Signed CDA package with eSignatures are mandatory". The CDA package profile is applicable to PCEHR interactions.

Reference:

https://www.vendors.nehta.gov.au (under "PCEHR Core System" then "Clinical Documents" then "Common Specifications").

3.5 CDA Documents

3.5.1 Creation

A CDA document, for example a Shared Health Summary, may be created by referring to the Shared Health Summary CDA Implementation Guide.

https://vendors.nehta.gov.au (under "Clinical Documents" then "PCEHR Shared Health Summary"); or by referring to the Template Packaging Specification

https://www.vendors.nehta.gov.au (under "PCEHR Core System" then "Template Service").

3.5.2 Validation

When a CDA document is created, to ensure that it conforms to specifications a validator may be used.

Reference:

Error! Hyperlink reference not valid..

3.5.3 Rendering

The CDA Rendering Guide is designed to provide eHealth software developers with a specification that addresses the rendering of CDA documents within their solutions. This provides specifications and constraints on the display of documents, and on their creation.

Reference:

Error! Hyperlink reference not valid..

3.6 Time Synchronisation

Synchronising time across the PCEHR eco system is essential to ensure the correctness of key timestamps between integrated systems and the PCEHR system. Time synchronization is typically done by Network Time Protocol (NTP) or Simple Network Time Protocol (SNTP). In short a server that wants to keep itself synchronized will run a NTP or SNTP client. This client will connect to one of the dedicated and published (s)NTP servers in the region. The time synchronization is thus an operating system level function where applications use libraries to query the OS time stamp. Hence time synchronization is not an application feature; it is a local installation feature. The IHE XDS framework also mandates NTP or SNTP for time synchronization.

The following resources provide good introductions to time synchronization:

- http://en.wikipedia.org/wiki/NTP
- http://en.wikipedia.org/wiki/SNTP#SNTP
- http://www.ihe.net/Technical_Framework/upload/IHE_ITI_TF_Rev8-0_Vol2a_FT_2011-08-19.pdf) section 3.1 references time synchronization

3.6.1 PCEHR Timestamps

Time is stated in several layers in the PCEHR System integration:

- CDA Layer: In the actual CDA document
- XDS Layer: In the XDS Header
- Transport layer: In the PCEHR Common header

In the general case different systems are involved in each of the layers above. For the purpose of this discussion the following components are involved:

- A clinical system creates the CDA document. This can be standard desktop PC residing on the local LAN in a hospital.
- An integration system creates the message body which involves doing the XDS packaging and possibly also the signing of the CDA document. This can be a server that the clinical system is integrated in to for the purpose of communicating with PCEHR System.
- A gateway system does the actual communication to PCEHR System. This involves creating the envelope of the message and connecting to the PCEHR System and sending the message. This is also likely to be a server based system.

Naturally there is a huge range of local architectures and above is one of many possibilities. The point to note here is that for the purpose of this discussion it cannot be assumed all systems are a monolithic GP desktop system.

3.6.2 CDA Layer

In clinical documents several time stamps are present. These time stamps are generally of a clinical safety nature, for example when an onset of a disease is observed. The date and time must be recorded correctly. Therefore, the time stamps that can occur in a clinical document are meaningful for synchronisation. Some examples are as follows:

- ClinicalDocument/effectiveTime - this is the creation date of the document and may be pre-set by the clinical information system that the author of the document uses to create the document.
- ClinicalDocument/legalAuthenticator/time - this is the approval time stamp and may be pre-set by the authoring / approving system.

Other dates in a clinical document such as the “Estimated or actual date the Problem began, in the opinion of the clinician” needs to be selected by the author.

3.6.3 XDS Layer

The XDS meta data contains some time stamps these time stamps are used in e.g. document lists and are thus associated with some clinical safety and usability requirements:

- Service Start time: The datetime the service being performed which caused the document to be created started

- Service stop time: 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.
- Submission date time: The date and time that the document was submitted to the PCEHR System.
- Document creation time: The time the document was created

Where the XDS document creation date should be the same as ClinicalDocument/effectiveTime and for shared health summary and event summary the service start / stop time should be the same as document creation date.

Out of these dates it is only Submission date time can be automatically set by the system when submitting the CDA document to the PCEHR System, the others have constraints where these must align to dates in the CDA document. The exception is for discharge summaries.

3.6.4 Transport Layer

In the Common PCEHR header a timestamp was introduced to support the ATS5821 implementation. The Timestamp is signed and used to detect possible man in the middle attacks. This timestamp should be automatically generated when making the transmission.

3.6.5 Timestamps to synchronise

The rationale to do time synch is to synchronise the following date stamps:

- CDA: ClinicalDocument/effectiveTime. Possible but may be overridden locally
- XDS: Submission timestamp: Recommended but the semantic of this field is the date when it was submitted locally. If the local implementation has a queue or a batch job to upload or a local outage this timestamp may differ quite a lot from the PCEHR system time when the message is received.
- TL: timestamp: Recommended and unless this timestamp reconciles to the server within some time interval the message may be rejected as a potential man in the middle attack can not be excluded.

3.6.6 Implementation

The technology to do time synchronization is mature, there are no known security issues with the technology and the technology is supported by all platforms that are likely to be used in any of the layers described in this doc. It is strongly recommended that time synchronization is deployed at each site integrating to PCEHR System. From a local system maintenance point of view there is a maintenance overhead ensuring the local (S)NTP client, (S)NTPd, is running. For resources on how to setup and run (S)NTP clients see the following list:

- http://www.ntp.org/
- http://www.pool.ntp.org/en/
- http://defaultreasoning.com/2009/11/16/synchronize-time-with-external-ntp-server-on-windows-server-2008-r2/

4 Web Services

4.1 Overview

The PCEHR System Interfaces are exposed using Web Services.

Web Services is a systems interface technology designed to support interoperable system-to-system interaction over a network. It has an interface described in a machine-processable format: the Web Services Description Language (WSDL)[1].

PCEHR System Web Service Definition is described in the following Technical Service Specifications (TSS):

- PCEHR Record Access Service Technical Service Specification
- PCEHR Document Exchange Service Using the IHE XDS.b Platform Technical Service Specification
- PCEHR View Service Technical Service Specification
- PCEHR Registration Service Technical Service Specification

PCEHR System Web Services conform to the following standards:

- E-health web services profiles (ATS5820)
- E-health XML secured payload profiles (ATS5821)

4.2 E-health Web Service Profile (ATS 5820-2010)

This standard designates the SOAP Web Service specification for the E-health ecosystem, to guarantee Web Services interoperability. The PCEHR B2B conforms to the Web Service Base Profile (Section 2 of ATS5820) and uses the TLS Security Profile (Section 8) to secure the service.

4.2.1 TLS Security Profile

TLS security profile requires the Service Invoker and Service Provider to support mutual authenticated connection. The PCEHR System requires the connected client to secure the connection using TLS mutual authentication using PCEHR compliant digital X.509 HPI-O credential for Clinical Information System CIS or PCEHR compliant X.509 credential for Contracted Service Provider (CSP).

4.2.2 WS-Addressing 1.0

Web Service Addressing 1.0 is used to define Web Service Metadata within the PCEHR Web Services as follows:

- **MessageID**
  Message Id needs to be UUID (Universal Unique Id) as per Section 6.1.3.4.2 in ATS5820
- **Action**
  This value needs to be populated with the value that is defined in WSDL
- **To**
  This value needs to be set as
  "http://www.w3.org/2005/08/addressing/anonymous"

[1] Reference from http://en.wikipedia.org/wiki/Web_service

4.3 eHealth XML Secured Payload (ATS 5821-2010)

This specification defines a set of interoperable mechanisms for representing secured XML data for e-health. Security here refers to the use of digital signatures, cryptographic encryption, or a combination of them[2].

The PCEHR System uses XML Signature Profile (see section 4 of ATS5821) to provide data and transaction provenance for all Web Service communications. All communications to and from the PCEHR System require the Service Invoker to provide a digital signature for the following SOAP Element and be represented as per ATS5821 specification:

- SOAP/Header/Timestamp
- SOAP/Header/PCEHRHeader
- SOAP/Body

Examples of complete headers are given in the examples in section 10.

Example of a secured payload:

```
http://www.w3.org/2003/05/soap-envelope">
  <s:Header>
    ..................
    <h:signature xmlns:h="http://ns.electronichealth.net.au/pcehr/xsd/common/Co
mmonCoreElements/1.0" xmlns="http://ns.electronichealth.net.au/pcehr/xsd/common
/CommonCoreElements/1.0">
      <Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
        <SignedInfo>
          <CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-exc-
c14n#"/>
          <SignatureMethod Algorithm="http://www.w3.org/2000/09/xmldsig#rsa-sha
1"/>
          <Reference URI="#body-2845e392-2d1c-4f49-ba7b-174dc91b0230">
            <Transforms>
              <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#"/>
            </Transforms>
            <DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"/>
            <DigestValue>EUgj0fWhIX3a8oXueQx5Oyu997c=</DigestValue>
          </Reference>
          <Reference URI="#user-72e59b6d-5576-4b6a-bf05-3dca6a6e6c8c">
            <Transforms>
              <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#"/>
            </Transforms>
            <DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"/>
            <DigestValue>S+Hca1vkQhjlnE32SISCMMcU5EM=</DigestValue>
          </Reference>
          <Reference URI="#time-15446806-bbad-4ac5-b784-531f2b0f5512">
            <Transforms>
              <Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#"/>
            </Transforms>
            <DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"/>
            <DigestValue>EueYIciHEthFTxQjrV9X5YJj1lg=</DigestValue>
          </Reference>
        </SignedInfo>
        <SignatureValue>
          Zqk1BAh..............o6ngRjVQ==
        </SignatureValue>
        <KeyInfo>
          <X509Data>
            <X509Certificate>
              MIIIuj...........ELQNIYA
```

[2] Reference from E-Health XML Secure Payload Specification 2010

```
            </X509Certificate>
          </X509Data>
        </KeyInfo>
      </Signature>
    </h:signature>
    ..............
  </s:Header>
```

4.4 Common PCEHR Header

All Web Service communication to the PCEHR System require the Service Invoker to provide information for the purpose of authorisation and auditing. This information is passed in the common element on all PCEHR system web service interfaces called PCEHRHeader.

PCEHRHeader defines this following information:

- `User`
  This field is used to record information of the end user of this Web Service interface; this information is used for the purpose of auditing.
  Only the `role` sub-element is optional.
- `ihiNumber`
  This field is for the Individual PCEHR's IHI number.
  This element is not required for certain opterations, such as Template Services.
- `productType`
  (contains `vendor`, `productName` and `productVersion` and the non-mandatory `platform`)
  These fields are used to record the Service Invoker system information for the purpose of authorisation (i.e. whether the Service Invoker system is the legitimate system that has previously passed CCA and NOC testing).
  `productType` is mandatory.
- `clientSystemType`
  This field is used to record the Service Invoker system role.
  This is mandatory.
- `accessingOrganisation`
  This field is used to record the Accessing Organisation that the Service Invoker is currently acting on behalf of.
  The elements organisationID and organisationName are mandatory.

Example

```
http://www.w3.org/2003/05/soap-envelope">
  <s:Header>
    ........
    <h:PCEHRHeader xmlns:h="http://ns.electronichealth.net.au/pcehr/xsd/common/
CommonCoreElements/1.0" xmlns="http://ns.electronichealth.net.au/pcehr/xsd/comm
on/CommonCoreElements/1.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance
" xmlns:xsd="http://www.w3.org/2001/XMLSchema" xml:id="user-72e59b6d-5576-4b6a-
bf05-3dca6a6e6c8c">
      <User>
        <IDType>HPII</IDType>
        <ID>8003619166674595</ID>
        <userName>John Doe</userName>
        <useRoleForAudit>false</useRoleForAudit>
      </User>
      <ihiNumber>8003608833337025</ihiNumber>
      <productType>
        <vendor>Oracle</vendor>
```

```
        <productName>dummyCISusr1</productName>
        <productVersion>dummyCISusrV1</productVersion>
        <platform>Windows XP</platform>
      </productType>
      <clientSystemType>CIS</clientSystemType>
      <accessingOrganisation>
        <organisationID>8003626566674315</organisationID>
        <organisationName>Local Practice</organisationName>
      </accessingOrganisation>
    </h:PCEHRHeader>
    ......
  </s:Header>
```

4.4.1 Clinical Information Systems

This following information is a guide to populate information into the PCEHRHeader for a Clinical Information System (CIS) system:

- When the end user has a known HPI-I number, this number must be populated to the `User.ID` field, and the `User.IDType` must be `HPII`. If the end user does not have any HPI-I number, the local system identifier must be populated with the `User.ID` field and the `User.IDType` must be `LocalSystemIdentifier`.
- `User.userName` field is mandatory and must be populated on every service call made to the PCEHR System. It shall be populated with the end user's name.
- The end user may choose to not disclose their name to the PCEHR System Audit Log. The end user then elects to disclose only their role by populating `User.role` field and set the `User.useRoleForAudit` to `true`.
- `clientSystemType` shall be set to `CIS` in all Web Service calls.
- When the Service Invoker is uploading or updating document, `User.ID` needs to be the end user's HPI-I number and the `User.IDType` shall be `HPII`.
- `accessingOrganisation.organisationID` shall be the same as the HPIO number in the certificate that is used for TLS.
- The Service Invoker accessing organisation may choose to disclose a different organisation name on the PCEHR Audit log by populating `accessingOrganisation.alternameOrganisationName`.

4.4.2 Contracted Service Providers

A contracted service provider (CSP) provides information technology services relating to the communication of health information and/or health information management services under contract to healthcare provider organisations registered with the HI Service. Before CSP organisations can access the HI Service on the healthcare organisation's behalf, it must be registered with the HI Service and be linked to a registered healthcare organisation.

This following information is a guide to populate information into the PCEHRHeader for a Contracted Service Provider (CSP) system:

- When the end user has a known HPI-I number, this number shall be populated with the `User.ID` field, and the `User.IDType` shall be `HPII`. If the end user does not have any HPI-I number, local system identifier shall be populated with the `User.ID` field and the `User.IDType` must be `LocalSystemIdentifier`.
- User.userName field is a mandatory field that shall be populated on every service call made to the PCEHR System. This shall be populated with the end user's name.

- The end user may choose to not disclose their name to the PCEHR System Audit Log.The end user then elects to disclose only their role by populating `User.role` field and set the `User.useRoleForAudit` to `true`.
- `clientSystemType` shall be set to `CSP` in all Web Service calls.
- When the Service Invoker is uploading or updating document, `User.ID` needs to be the end user's HPI-I number and `User.IDType` shall be `HPII`.

4.5 WSDL and XSD Variation

4.5.1 Overview

Some of WSDL and XDS files may require editing due to limitations of some of the WSDL client toolkits. Without these modifications, these toolkits may not work as expected.

4.5.2 rim.xsd on .NET & Java Environments

The RIM.XSD must be modified for Java and .NET to support XDS interface operations. The reasons for this modification is: the .NET `SVCUTIL.EXE` tool does not support the substitution groups defined in the schema and the 4 complex types must be explicitly defined in the Registry Object List Type; Java also does not support these definitions in the schema.

In the following example the modifications are highlighted in yellow.

```
  <complexType name="RegistryObjectListType">
    <sequence>
        <!-- ADDED THESE 4 ENTRIES IN TO GET AROUND JAVA AND SVCUTIL NOT
SUPPORTING substitutionGroup="tns:Identifiable" -->
        <!-- HAS TO BE IN THIS ORDER AS THIS IS HOW IT COMES BACK FROM ORACLE
INTERFACE -->
      <element maxOccurs="unbounded" minOccurs="0" ref="tns:ExtrinsicObject"/>
      <element maxOccurs="unbounded" minOccurs="0" ref="tns:RegistryPackage"/>
      <element maxOccurs="unbounded" minOccurs="0" ref="tns:Classification"/>
      <element maxOccurs="unbounded" minOccurs="0" ref="tns:Association"/>
        <!-- END OF MODIFICATION -->
      <element maxOccurs="unbounded" minOccurs="0" ref="tns:Identifiable"/>
    </sequence>
  </complexType>
```

5 Using the B2B Interface

5.1 Overview

The B2B interface is the API used by software developers to integrate the PCEHR System core functions with their product.

5.2 The PCEHR B2B Gateway Operations

A short summary of the full set of use cases for a CIS are as follows:

- Verify that a PCEHR exists
- Gain Access to a PCEHR
- Gain Access to a PCEHR Using "Emergency Access"
- Subsequent Access to a PCEHR
- Re-Authorise Access to a PCEHR
- Retrieve a Clinical Document
- Search for a Clinical Document
- Upload a Clinical Document
- Remove a Clinical Document
- Amend a Clinical Document
- Retrieve document list
- Access a view
- Assisted registration

See Appendix F for a description of use cases that are relevant to a Clinical Information System.

5.3 Conformance and System Behaviour

Third party products must behave according to the conformance points in the Technical Service Specifications.

5.4 Local Storage

Because the B2B operations require some orchestration, data obtained from earlier responses may need to be stored and cached locally for use in subsequent operations.

6 Record Access

6.1 Overview

The Record Access operations:

- Test whether the Healthcare Provider can access the PCEHR, and whether an access code is required for access.
- Can grant the Healthcare Provider access to an Individual's PCEHR using an access code or emergency assertion.

6.2 doesPCEHRExist

6.2.1 Request

Name of Request: doesPCEHRExist

This operation checks whether a PCEHR exists and can be accessed for a particular `ihiNumber` (given in the PCEHR Header).

The request may be used before a gainPCEHRAccess request (see section 6.3) where the `ihiNumber` is already known. It tests whether a PCEHR can be accessed and whether an access code is required. If the response indicates that the PCEHR does not exist, it means that there is no PCEHR record, or that access has been denied.

Inputs:

In the case of doesPCEHRExist, the only input is the standard PCEHR header (see section 4.4).

Example

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope">
  <s:Header>
    <Action xmlns="http://www.w3.org/2005/08/addressing" xmlns:a="http://www.w3.org/2003/05/soap-envelope" a:mustUnderstand="1">
      http://ns.electronichealth.net.au/pcehr/svc/PCEHRProfile/1.1/PCEHRProfilePortType/doesPCEHRExistRequest
    </Action>
    <h:PCEHRHeader xmlns:h="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema" xml:id="user-72e59b6d-5576-4b6a-bf05-3dca6a6e6c8c">
      <User>
        <IDType>HPII</IDType>
        <ID>8003619166674595</ID>
        <userName>John Doe</userName>
```

```
        <useRoleForAudit>false</useRoleForAudit>
      </User>
      <ihiNumber>8003608833337025</ihiNumber>
      <productType>
        <vendor>Oracle</vendor>
        <productName>dummyCISusr1</productName>
        <productVersion>dummyCISusrV1</productVersion>
        <platform>Windows XP</platform>
      </productType>
      <clientSystemType>CIS</clientSystemType>
      <accessingOrganisation>
        <organisationID>8003626566674315</organisationID>
        <organisationName>Local Practice</organisationName>
      </accessingOrganisation>
    </h:PCEHRHeader>
    <h:signature ..............>
      ..................
    </h:signature>
    ..................
    <MessageID xmlns="http://www.w3.org/2005/08/addressing">urn:uuid:903ab8f0-0a39-41ae-b03d-385740dbfa33</MessageID>
    ..................
  </s:Header>
  <s:Body xml:id="body-2845e392-2d1c-4f49-ba7b-174dc91b0230">
    <doesPCEHRExist xmlns="http://ns.electronichealth.net.au/pcehr/xsd/interfaces/PCEHRProfile/1.0" xmlns:xsi="http://www
.w3.org/2001/XMLSchema-instance" xsi:type="xsd:string"/>
  </s:Body>
</s:Envelope>
```

Coding Tips:

In .NET environment when the client code is generated using svcutil, the doesPCEHRExist input object needs to be set to an empty string so that the request message <doesPCEHRExist> appears in the SOAP message.

```
doesPCEHRExistRequest requestMsg = new doesPCEHRExistRequest();
requestMsg.doesPCEHRExist = "";
```

6.2.2 Response

Name of response: doesPCEHRExistResponse

Outputs:

See section 3 of *PCEHR Record Access Service, Technical Service Specification* (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=181) for the current list of the elements in the outputs, their data types, cardinality and the conformances.

Table 2: doesPCEHRExistResponse elements

Level 1 Element	Level 2 Element	Card	Explanation
DoesPCEHRExistResponse		1..1	
	PCEHRExists	1..1	`false | true` The default value is `false`. Value is set to `true` if 1. PCEHR exists for the `ihiNumber`, and 2. The accessing organisation has not been put on the individual's revoked list, and the disclosure indicator is set to *disclose*
	accessCodeRequired	0..1	If PCEHR is `false`, this element will set to `null`. If PCEHR is `true`, then possible values are: `withCode | withoutCode | AccessGranted`

Table 3: business explanation of the accesscodeRequired *values*

accessCodeRequired	Explanation
withCode	Access Code must be supplied to access PCEHR
withoutCode	Access code is not needed to access the PCEHR
AccessGranted	Access has been granted

Another more elaborate version of this table can also be found in section 4.3.1 of the *PCEHR Participation and Authorisation Functional Overview* (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=145).

See section 3, *Key Participation and Authorisation Concepts*, of the *PCEHR Participation and Authorisation Functional Overview* (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=145) for further detail on access lists and disclosure indicators.

If the accessingOrganisation is in the individual's access list, but access has been revoked, the PCEHRExists element will be `false` and accessCodeRequired will be `null`.

Example

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
  <soap:Header>
    <wsa:Action xmlns:wsa="http://www.w3.org/2005/08/addressing">
      http://ns.electronichealth.net.au/pcehr/svc/PCEHRProfile/1.1/PCEHRProfilePortType/doesPCEHRExistResponse
    </wsa:Action>
    <wsa:MessageID xmlns:wsa="http://www.w3.org/2005/08/addressing">urn:uuid:1c09f4cc-2c5f-4750-a2e0-6056f6dc7843</wsa:Me
ssageID>
    <wsa:RelatesTo xmlns:wsa="http://www.w3.org/2005/08/addressing">urn:uuid:903ab8f0-0a39-41ae-b03d-385740dbfa33</wsa:Re
latesTo>
    <ns:signature ..........
      ...................
    </ns:signature>
  </soap:Header>
  <S:Body xmlns:S="http://www.w3.org/2003/05/soap-envelope" xml:id="Id-0001339719846222-74d7a1ef4fda80a61409abc3-2">
    <ns:doesPCEHRExistResponse xmlns:ns="http://ns.electronichealth.net.au/pcehr/xsd/interfaces/PCEHRProfile/1.0">
      <ns:PCEHRExists>true</ns:PCEHRExists>
      <ns:accessCodeRequired>AccessGranted</ns:accessCodeRequired>
    </ns:doesPCEHRExistResponse>
  </S:Body>
</soap:Envelope>
```

Error:

In this case the PCEHR System will return SOAP Fault indicating that there has been an error in processing the message.

Standard Error message will be returned in the SOAP Fault detail.

Example:

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap envelope">
  <soap:Header><wsa:Action xmlns:wsa="http://www.w3.org/2005/08/addressing">http://ns.electronichealth.net.au/pcehr/svc/P
CEHRProfile/1.1/PCEHRProfilePortType/Fault/standardError</wsa:Action><wsa:MessageID xmlns:wsa="http://www.w3.org/2005/08/
addressing">uuid:Id 0001337125703555 5e49b1384fb2eb4705190000 1</wsa:MessageID><wsa:RelatesTo xmlns:wsa="http://www.w3.or
g/2005/08/addressing">urn:uuid:413fef93 1564 4916 accb 609e815fa811</wsa:RelatesTo></soap:Header>
  <soap:Body>
      <soap:Fault>
          <soap:Code>
              <soap:Value>soap:Sender</soap:Value>
          </soap:Code>
          <soap:Reason>
              <soap:Text xml:lang="en AU">PCEHR_ERROR</soap:Text>
          </soap:Reason>
          <soap:Detail>
              <ns2:standardError xmlns:ns2="http://ns.electronichealth.net.au/wsp/xsd/StandardError/2010">
              <ns2:errorCode>badParam</ns2:errorCode>
                  <ns2:message>PCEHR_ERROR_0505   Invalid HPI O</ns2:message>
              </ns2:standardError>
          </soap:Detail>
      </soap:Fault>
  </soap:Body>
</soap:Envelope>
```

6.3 gainPCEHRAccess

6.3.1 Request

Name of request: gainPCEHRAccess

In this operation, the PCEHR individual is identified with the `ihiNumber` in the PCEHRHeader.

If access is granted, with or without the requirement of an access code, the response returns the individual's details, including the `ihiNumber`, and the status of the PCEHR (in the `ihiStatus` element).

If access is not granted there is a mechanism to request temporary, emergency access.

Inputs:

PCEHRHeader (see section 4.4).

gainPCEHRAccess

See section 3 of *PCEHR Record Access Service, Technical Service Specification* (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=181) for the current list of the elements in the inputs, their data types, cardinality and the conformances.

Table 4: gainPCEHRAccess message inputs

Level 1 Element	Level 2 Element	Level 3 Element	Card	Explanation
PCEHRRecord			1..1	
	AuthorisationDetails		1..1	See *RegistryObjectList* for submitting new document or an amendment.
		accessType	1..1	`AccessCode` | `EmergencyAccess` The *accessType* is usually *AccessCode*. If the access code is not known in an emergency, the *accessType* can be set to *EmergencyAccess* and temporary access will be granted.
		accessCode	0.1	This element is set to the value of the access code. If access to the PCEHR does not require a code, this element is set to `null`.

Example

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope">
  <s:Header>
    <Action xmlns="http://www.w3.org/2005/08/addressing" xmlns:a="http://www.w3.org/2003/05/soap-envelope" a:mustUnderstand="1">
      http://ns.electronichealth.net.au/pcehr/svc/PCEHRProfile/1.1/PCEHRProfilePortType/gainPCEHRAccessRequest
    </Action>
    <h:PCEHRHeader xmlns:h="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema" xml:id="user-b08e7b78-313b-41d8-9b73-f6ee95b87bff">
      <User>
        <IDType>HPII</IDType>
        <ID>8003619166674595</ID>
        <userName>John Doe</userName>
        <useRoleForAudit>false</useRoleForAudit>
```

```
      </User>
      <ihiNumber>8003608833337025</ihiNumber>
      <productType>
        <vendor>Oracle</vendor>
        <productName>dummyCISusr1</productName>
        <productVersion>dummyCISusrV1</productVersion>
        <platform>Windows XP</platform>
      </productType>
      <clientSystemType>CIS</clientSystemType>
      <accessingOrganisation>
        <organisationID>8003626566674315</organisationID>
        <organisationName>Local Practice</organisationName>
      </accessingOrganisation>
    </h:PCEHRHeader>
    <h:signature ..............>
      ......................
    </h:signature>
    ................
    <MessageID xmlns="http://www.w3.org/2005/08/addressing">urn:uuid:3260deb7-92c7-4acb-9a05-2c78b1309812</MessageID>
    ................
  </s:Header>
  <s:Body xml:id="body-5b239ccb-425c-4b16-b1c0-09f533e9d454">
    <gainPCEHRAccess xmlns="http://ns.electronichealth.net.au/pcehr/xsd/interfaces/PCEHRProfile/1.0">
      <PCEHRRecord>
        <authorisationDetails>
          <accessType>EmergencyAccess</accessType>
        </authorisationDetails>
      </PCEHRRecord>
    </gainPCEHRAccess>
  </s:Body>
</s:Envelope>
```

6.3.2 Response

Name of Response: gainPCEHRAccessResponse

Outputs:

See section 3 of *PCEHR Record Access Service, Technical Service Specification* (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=181) for the current list of the elements in the outputs, their data types, cardinality and the conformances.

Table 5: gainPCEHRAccessResponse message elements

Level 1 Element	Level 2 Element	Level 3 Element	Level 4 Element	Card	Explanation
GainPCEHR AccessResponse				1..1	
	ResponseStatus			1..1	Success or Failure
		Code		1..1	PCEHR_SUCCESS or PCEHR_ERROR_XXXX
		Description		1..1	Success or [Error Description]
		Details		0..1	
	Individual				
		ihiNumber		1..1	Individual Health Identifier
		medicareCardNumber		0..1	The Medicare card number
		medicareIRN		0..1	The patient's Individual Reference Number (where there several patients listed on the one Medicare card)
		dvaFileNumber		0..1	File Number for the Department of Veteran Affairs
		militaryHealthNumber		0..1	This element supports the Australian Defence Force's Joint eHealth Data Initiative (JeDHI)
		ihiRecordStatus		1..1	`Verified | Unverified`
		ihiStatus		1..1	`Active | Deceased | Retired | Resolved | Expired`
		dateOfBirth		1..1	Given in date format ("xs:date")

Level 1 Element	Level 2 Element	Level 3 Element	Level 4 Element	Card	Explanation
		dateAccuracyIndicatorType		1..1	<Day accuracy><Month accuracy><Year Accuracy> where A=accurate E=estimate U=unknown Example: AUE Accurate day, unknown month, estimated year.
		sex		1..1	M | F | I | N where: M=Male, F=Female, I=Intersex or Indeterminate, N=Not specified.
		name			
			nameTitle	0..1	These are specified by Medicare and defined in the PCEHR_CommonTypes_Supplementary schema. A few examples: MR | MRS | MS | DR | Nurse
			familyName	1..1	String
			givenName	0..2	String
			nameSuffix	0..1	These are specified by Medicare and defined in the PCEHR_CommonTypes_Supplementary schema. A few examples: ESQ | JNR | SNR | OA | MP | MD
			nameAlias	0..1	Defined as "any other name the person is known by".

Example

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
  <soap:Header>
    <wsa:Action xmlns:wsa="http://www.w3.org/2005/08/addressing">
      http://ns.electronichealth.net.au/pcehr/svc/PCEHRProfile/1.1/PCEHRProfilePortType/gainPCEHRAccessResponse
    </wsa:Action>
    <wsa:MessageID xmlns:wsa="http://www.w3.org/2005/08/addressing">urn:uuid:16ea4b94-195c-4caf-8094-67dff4051586</wsa:Me
ssageID>
    <wsa:RelatesTo xmlns:wsa="http://www.w3.org/2005/08/addressing">urn:uuid:3260deb7-92c7-4acb-9a05-2c78b1309812</wsa:Re
latesTo>
    <ns:signature ..........>
      ...................
    </ns:signature>
  </soap:Header>
  <S:Body xmlns:S="http://www.w3.org/2003/05/soap-envelope" xml:id="Id-0001339720147394-f91504044fda81d308f993ab-2">
    <ns:gainPCEHRAccessResponse xmlns:ns="http://ns.electronichealth.net.au/pcehr/xsd/interfaces/PCEHRProfile/1.0">
      <ns:responseStatus>
        <ns1:code xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">PCEHR_SUCCESS</ns
1:code>
        <ns1:description xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">SUCCESS</n
s1:description>
      </ns:responseStatus>
      <ns:individual>
        <ns1:ihiNumber xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">800360883333
7025</ns1:ihiNumber>
        <ns:ihiRecordStatus>Verified</ns:ihiRecordStatus>
        <ns:ihiStatus>Active</ns:ihiStatus>
        <ns:dateOfBirth>1966-09-07</ns:dateOfBirth>
        <ns1:dateAccuracyIndicatorType xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1
.0">AAA</ns1:dateAccuracyIndicatorType>
        <ns1:sex xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">M</ns1:sex>
        <ns:name>
          <ns1:familyName xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">JUSTICE</
ns1:familyName>
          <ns1:givenName xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">FERDINAND<
/ns1:givenName>
        </ns:name>
      </ns:individual>
    </ns:gainPCEHRAccessResponse>
  </S:Body>
</soap:Envelope>
```

Error:

There are 2 types of error which may be returned by the PCEHR System:

- **Standard Error**, the PCEHR System will return this error when there is a Web Services Error as per ATS5820 specification during the transaction. This error will be returned as SOAP Fault.

Example:

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope" xmlns:wsa="http://www.w3.org/2005/08/addressing">
  <soap:Header>
      <wsa:Action>http://ns.electronichealth.net.au/pcehr/svc/PCEHRProfile/1.1/PCEHRProfilePortType/Fault/standardError</
wsa:Action>
      <wsa:MessageID>uuid:Id-0001337127076028-102367654fb2f0a416790000-1</wsa:MessageID>
      <wsa:RelatesTo>urn:uuid:7839497d-5fab-4aa6-ab21-4e8d7118c28d</wsa:RelatesTo>
  </soap:Header>
  <soap:Body>
      <soap:Fault>
          <soap:Code>
              <soap:Value>soap:Sender</soap:Value>
          </soap:Code>
          <soap:Reason>
              <soap:Text xml:lang="en-AU">PCEHR_ERROR</soap:Text>
          </soap:Reason>
          <soap:Detail>
              <ns2:standardError xmlns:ns2="http://ns.electronichealth.net.au/wsp/xsd/StandardError/2010">
                  <ns2:errorCode>badParam</ns2:errorCode>
                  <ns2:message>PCEHR_ERROR_0505 - Invalid HPI-O</ns2:message>
              </ns2:standardError>
          </soap:Detail>
      </soap:Fault>
  </soap:Body>
</soap:Envelope>
```

- **Functional Error**, the PCEHR System will return this when there is a functional/business error during the transaction. This error will be returned in the *responseStatus* within the SOAP Body. See Appendix E.

Example

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope" xmlns:ns="http://ns.electronichealth.net.au/pcehr/xsd
/common/CanonicalModel/0.1" xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">
  <soap:Header>
    <wsa:Action xmlns:wsa="http://www.w3.org/2005/08/addressing">http://ns.electronichealth.net.au/pcehr/svc/PCEHRProfile
/1.1/PCEHRProfilePortType/gainPCEHRAccessResponse</wsa:Action>
    <wsa:MessageID xmlns:wsa="http://www.w3.org/2005/08/addressing">urn:uuid:8262970e-9a65-4771-8632-12f6bb148aa5</wsa:Me
ssageID>
    <wsa:RelatesTo xmlns:wsa="http://www.w3.org/2005/08/addressing">urn:uuid:64a42f96-db4e-447d-a11c-fe925cbd0864</wsa:Re
latesTo>
    <ns:signature>....</ns:signature>
  </soap:Header>
  <soap:Body xml:id="Id-0001337127802352-76fd83944fb2f37a07d90000-2">
    <ns1:gainPCEHRAccessResponse xmlns:S="http://www.w3.org/2003/05/soap-envelope" xmlns:ns1="http://ns.electronichealth.
net.au/pcehr/xsd/interfaces/PCEHRProfile/1.0">
      <ns1:responseStatus>
        <ns1:code>PCEHR_ERROR_5103</ns1:code>
        <ns1:description >PCEHR is found but Access Code is invalid</ns1:description>
      </ns1:responseStatus>
    </ns1:gainPCEHRAccessResponse>
  </soap:Body>
</soap:Envelope>
```

Functional Errors

Table 6: gainPCEHRAccessResponse message functional error codes

Code	Explanation
PCEHR_SUCCESS	SUCCESS
PCEHR_ERROR_5101	PCEHR record not found
PCEHR_ERROR_5102	PCEHR is found but access code is required
PCEHR_ERROR_5103	PCEHR is found but access code is invalid
PCEHR_ERROR_5104	You are not authorised to access this Record
PCEHR_ERROR_5001	The family name contains invalid characters
PCEHR_ERROR_5002	The birth year must not be before 1800
PCEHR_ERROR_5003	The date of birth must not be in the future
PCEHR_ERROR_5004	Medicare card fails check digit routine
PCEHR_ERROR_5005	The given name contains invalid characters
PCEHR_ERROR_5006	No unique active IHI found
PCEHR_ERROR_5007	IHI number fails the check digit routine
PCEHR_ERROR_5008	No unique active IHI found
PCEHR_ERROR_5009	Multiple search criteria keyed. Please refine the search criteria.
PCEHR_ERROR_5010	No unique active IHI found
PCEHR_ERROR_5011	The DVA file number entered is invalid
PCEHR_ERROR_5012	No unique active IHI found
PCEHR_ERROR_5013	IHI number must be 16 digits

7 Document Exchange

7.1 Overview

The Document Exchange operations are:

- Submit the document to the PCEHR System using XDS.b ITI-41
- Retrieve the document from the PCEHR System using XDS.b ITI-43
- Find documents in the PCEHR System using XDS.b ITI-18
- Remove document from the PCEHR System

All clinical documents must be a CDA document and packaged according to the CDA Packaging specification, see section 3.5 for further information how to package the CDA document.

7.2 ITI-41 Provide & Register Document Set – b

The PCEHR System uses ITI-41 Provider & Register Document Set-b to allow client system to submit a new document the PCEHR System. When it is successful, the document will be registered and stored in the PCEHR System.

The client system can also use ITI-41 to submit an amendment to the document that previously uploaded by providing more information, see the table on amending documents on page 40.

7.2.1 ProvideAndRegisterDocumentSetRequest

7.2.1.1 Request

Request Name: ProvideAndRegisterDocumentSetRequest

PCEHRHeader (see section 4.4)

ProvideAndRegisterDocumentSetRequest

See section 3.3.1 of the PCEHR Document Exchange Service Using the IHE XDS.b Platform (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=184).

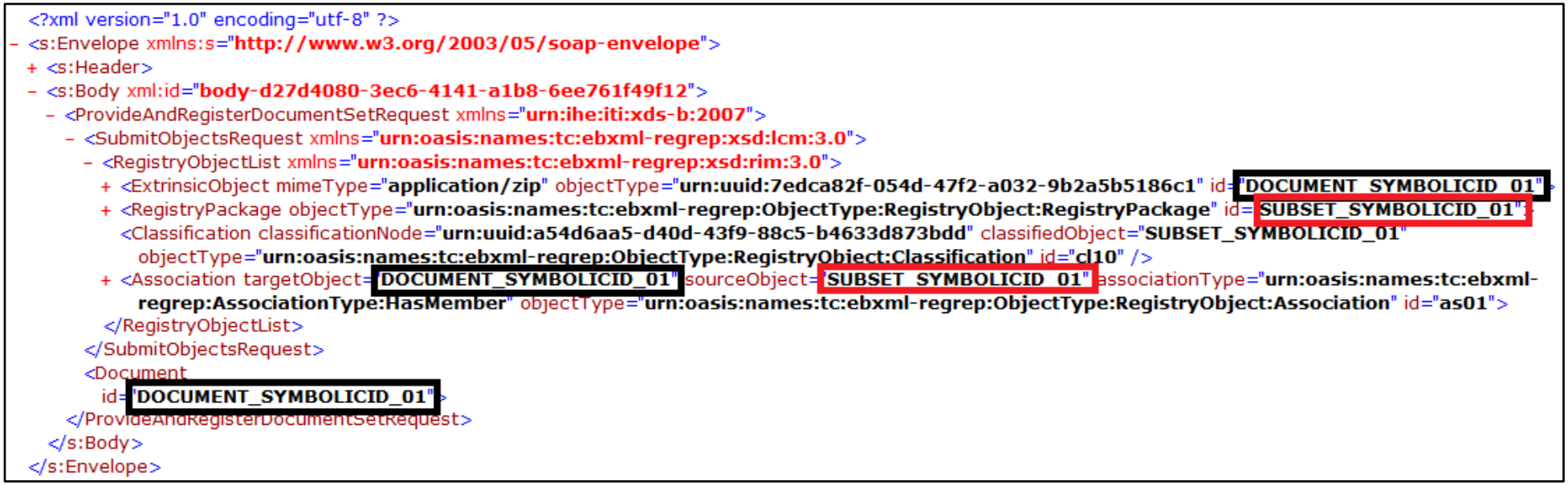

Table 7 ProvideAndRegisterDocumentSetRequest

Level 1 Element	Level 2 Element	Card	Explanation
SubmitObjectRequest		1..1	XDS Metadata
	RegistryObjectList	1..1	See *RegistryObjectList* for submitting new document or an amendment.
Document		1..1	The element id is the XDSDocumentEntry symbolic Id.
		1..1	CDA Package in base64 string

Table 8 RegistryObjectList – New Document

Level 1 Element	Level 2 Element	Card	Explanation
RegistryObjectList		1..1	XDS Metadata
	ExtinsicObject	1..1	See XDSDocumentEntry
	RegistryPackage	1..1	See XDSSubmissionEntry
	Classification	1..1	XDSSubmissionSet
	Association	1..1	Association type is XDS_ASSOCIATION_TYPE_HAS_MEMBER, see Appendix C for the Object Id. Target object is the XDSDocumentEntry symbolic Id. Source object is the XDSSubmissionEntry symbolic Id.

Table 9 RegistryObjectList – Amend Document

Level 1 Element	Level 2 Element	Card	Explanation
RegistryObjectList		1..1	XDS Metadata
	ExtinsicObject	1..1	See XDSDocumentEntry
	RegistryPackage	1..1	See XDSSubmissionEntry
	Classification	1..1	See XDSSubmissionSet
	Association	1..1	Association type is XDS_ASSOCIATION_TYPE_HAS_MEMBER, see Appendix C for the Object Id. Target object is the XDSDocumentEntry symbolic Id. Source object is the XDSSubmissionEntry symbolic Id.
	Association	1..1	Association type is XDS_ASSOCIATION_TYPE_RPLC, see Appendix C for the Object Id Target Object is the Previous Document registry unique identifier. Please see section Appendix B for Get Document Query Type.

Level 1 Element	Level 2 Element	Card	Explanation
			Source object is the XDSSubmissionEntry symbolic Id.

Table 10 XDSDocumentEntry

Level 1 Element	Level 2 Element	Level 3 Element	Card	Explanation
ExtrinsicObject			1..1	Object type is XDS_DOCUMENT_ENTRY, see Appendix C for the Object Id. Id is the a Symbolic Id which later on will be referenced in the Document element, Association, etc.
	creation Time		1..1	This is populated from CDA document, see Appendix D Note: when the time in CDA document contains Timezone information, the timezone needs to be removed from the creationTime Field.
	language Code		1..1	See Appendix D.1
	serviceStartTime		1..1	See Appendix D.1
	sourcePatientId		1..1	See Appendix D.1
	name		1..1	Document Name
	classification		1..1	Classification scheme XDS_DOCUMENT_ENTRY_AUTHOR, see Appendix C for the Object Id
		authorInstitution	1..1	This is populated from CDA document, see Appendix D.1
		authorPerson	1..1	This is populated from CDA document, see Appendix D.1
	Classification		1..1	Classification scheme XDS_DOCUMENT_CLASS_CODE, see Appendix C for the Object Id. nodeRepresentation is CDA Document classCode, see Appendix D.1
		codingScheme	1..1	LOINC
		name	1..1	LOINC Code display name
	Classification		1..1	Classification scheme XDS _DOCUMENT_FORMAT_CODE, see Appendix C for the Object Id. nodeRepresentation is_document template OID see Appendix A
		codingScheme	1..1	"PCEHR_FormatCodes"

Level 1 Element	Level 2 Element	Level 3 Element	Card	Explanation
		name	1..1	Template Name
	Classification		1..1	Classification scheme XDS_DOCUMENT_ENTRY_HEALTHCARE_FACILITY_TYPE_CODE, see Appendix C for the Object Id. nodeRepresentation is the ANZIC Concept Code see section Appendix A for the Facility Type Codes
		codingScheme	1..1	ANZIC
		name	1..1	ANZIC Code Display Name
	Classification		1..1	Classification scheme XDS_DOCUMENT_ENTRY_PRACTICE_SETTING _CODE, see Appendix C for the Object Id. nodeRepresentation is the ANZIC Concept Code, see Appendix A for the Practice Setting Codes
		codingScheme	1..1	ANZIC
		name	1..1	ANZIC Code Display Name
	Classification		1..1	Classification scheme XDS_DOCUMENT_ENTRY_TYPE _CODE, see Appendix C for the Object Id. nodeRepresentation is CDA Document classCode, see Appendix D.1
		codingScheme	1..1	LOINC
		name	1..1	LOINC Code Display Name
	ExternalIdentifier		1..1	IdentificationScheme is XDS_DOCUMENT_ENTRY_PATIENT_ID; see Appendix C for the Object Id. Value is patientId from CDA Document, see Appendix D.1
		name	1..1	"XDSDocumentEntry.patientId"
	ExternalIdentifier		1..1	IdentificationScheme is XDS_DOCUMENT_ENTRY_UNIQUE_ID; see Appendix C for the Object Id. Value is uniqueId from CDA Document, see Appendix D.1
		name	1..1	"XDSDocumentEntry.uniqueId"

Table 11 XDSSubmissionSet

Level 1 Element	Level 2 Element	Level 3 Element	Card	Explanation
RegistryPackage			1..1	Object type is XDS_REGISTRY_PACKAGE, see Appendix C for the Object Id Id is the Symbolic Id for submission, this Id will be reference in the association and XDSDocumentSet.
	submissionTime		1..1	Datetime when the XDS message is created
	Classification		1..1	Classification scheme XDS_SUBMISSION_SET_AUTHOR, see Appendix C for the Object Id.
		authorInstitution	1..1	authorOrgName + "^^^^^^^^^^" + authorOrgId, see Appendix D.1 how to obtain it from the CDA document
		authorPerson	1..1	"^" + authorFamily + "^" + authorGiven + "^^^" + authorPrefix + "^^^^&" + authorHPII + "&ISO", see Appendix D.1 how to obtain it from the CDA document
	Classification		1..1	Classification scheme XDS_SUBMISSION_SET_CONTENT_TYPE_CODE, see Appendix C for the Object Id.
	classification		1..1	Classification scheme XDS_DOCUMENT_ENTRY_AUTHOR, see Appendix C for the Object Id nodeRepresentation is CDA Document classCode, see Appendix D.1
		codingScheme	1..1	LOINC
		name	1..1	LOINC Code display name
	ExternalIdentifier		1..1	IdentificationScheme is XDS_SUBMISSION_SET_UNIQUE_ID, see Appendix C for the Object Id. Value is uniqueId from CDA Document, see Appendix D.1
		name	1..1	"XDSSubmissionSet.uniqueId"
	ExternalIdentifier		1..1	IdentificationScheme is XDS_SUBMISSION_SET_SOURCE_ID, see Appendix C for the Object Id. Value is authorInstitution from CDA Document, see Appendix D.1

Level 1 Element	Level 2 Element	Level 3 Element	Card	Explanation
		name	1..1	"XDSSubmissionSet.sourceId"
	ExternalIdentifier		1..1	IdentificationScheme is XDS_SUBMISSION_SET_PATIENT_ID, see Appendix C for the Object Id. Value is patientId from CDA Document, see Appendix D.1
		name	1..1	"XDSSubmissionSet.patientId"

Coding Tips:

When populating the XDS metadata, take it directly from the CDA document you are uploading, to guarantee that the PCEHR System will validate the same data. Otherwise the PCEHR System will return "PCEHR_ERROR_3002 - Document metadata failed validation"

Note: Each field may present the data item in a different format, but the underlying value SHALL be the same.

E.g.: IHI = 8003601234567890 = 8003601234567890^^^&1.2.36.1.2001.1003.0&ISO

Table 12: CDA Document field correspondences

PCEHR header	Metadata Field	CDA Document	Validation
ihiNumber	- XDSDocumentEntry.sourcePatientId - XDSDocumentEntry.patientId - XDSSubmissionSet.patientId	/cda:ClinicalDocument/cda:recordTarget/cda:patientRole/cda:patient/ext:asEntityIdentifier[@classCode='IDENT']/ext:id[@assigningAuthorityName='IHI']/@root	These three fields SHALL have the same IHI number.
User.ID	- XDSDocumentEntry.authorPerson - XDSSubmissionSet.authorPerson	/cda:ClinicalDocument/cda:author/cda:assignedAuthor/cda:assignedPerson/ext:asEntityIdentifier[@classCode='IDENT']/ext:id[@assigningAuthorityName='HPI-I']/@root	These three fields SHALL have the same HPI-I number.

PCEHR header	Metadata Field	CDA Document	Validation
AccessingOrganisation.OrganisationID	- XDSDocumentEntry.authorInstitution - XDSSubmissionSet.authorInstitution - XDSSubmissionSet.sourceId	/cda:ClinicalDocument/cda:author/cda:assignedAuthor/cda:assignedPerson/ext:asEmployment/ext:employerOrganization/cda:asOrganizationPartOf/cda:wholeOrganization/ext:asEntityIdentifier[@classCode='IDENT']/ext:id[@assigningAuthorityName='HPI-O']/@root	These three fields SHALL have the same HPI-O number.
N/A	- XDSDocumentEntry.uniqueId	/cda:ClinicalDocument/cda:id/@root	These two fields SHALL have the same OID (or in the case of a UUID, calculated to be the same).

Example

Example of a document being submitted for the first time with a *ProvideAndRegisterDocumentRequest*.

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope">
  <s:Header>
    <Action xmlns="http://www.w3.org/2005/08/addressing" xmlns:a="http://www.w3.org/2003/05/soap-envelope" a:mustUnderstand="1">urn:ihe:iti:2007:ProvideAndRegisterDocumentSet-b</Action>
    <h:PCEHRHeader xmlns:h="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema" xml:id="user-287077fc-31cc-4864-8613-3d2928013040">
      <User>
        <IDType>HPII</IDType>
        <ID>8003614166668846</ID>
        <userName>John Doe</userName>
        <useRoleForAudit>false</useRoleForAudit>
      </User>
      <ihiNumber>8003601243017717</ihiNumber>
      <productType>
        <vendor>Oracle</vendor>
        <productName>dummyCISusr1</productName>
        <productVersion>dummyCISusrV1</productVersion>
        <platform>Windows XP</platform>
      </productType>
      <clientSystemType>CIS</clientSystemType>
```

```
      <accessingOrganisation>
        <organisationID>8003620833337558</organisationID>
        <organisationName>Local Practice</organisationName>
      </accessingOrganisation>
    </h:PCEHRHeader>
    <h:signature ............>
      ......................
    </h:signature>
    ...................
    <MessageID xmlns="http://www.w3.org/2005/08/addressing">urn:uuid:ec9585f5-4b2b-4c0d-8206-5c0a3fd54357</MessageID>
    ...................
  </s:Header>
  <s:Body xml:id="body-d582c4f6-ff49-4950-85f0-6e1154bbd03b">
    <ProvideAndRegisterDocumentSetRequest xmlns="urn:ihe:iti:xds-b:2007">
      <SubmitObjectsRequest xmlns="urn:oasis:names:tc:ebxml-regrep:xsd:lcm:3.0">
        <RegistryObjectList xmlns="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0">
          <ExtrinsicObject mimeType="application/zip" objectType="urn:uuid:7edca82f-054d-47f2-a032-9b2a5b5186c1" id="DOCU
MENT_SYMBOLICID_01">
            <Slot name="creationTime">
              <ValueList>
                <Value>201112011100</Value>
              </ValueList>
            </Slot>
            <Slot name="languageCode">
              <ValueList>
                <Value>en-AU</Value>
              </ValueList>
            </Slot>
            <Slot name="serviceStartTime">
              <ValueList>
                <Value>201112011100</Value>
              </ValueList>
            </Slot>
            <Slot name="sourcePatientId">
              <ValueList>
                <Value>8003601243017717^^^&amp;amp;1.2.36.1.2001.1003.0&amp;amp;ISO</Value>
              </ValueList>
            </Slot>
            <Name>
              <LocalizedString value="Shared Health Summary"/>
            </Name>
            <Classification nodeRepresentation="" classifiedObject="DOCUMENT_SYMBOLICID_01" classificationScheme="urn:uui
```

```
d:93606bcf-9494-43ec-9b4e-a7748d1a838d" id="cl01">
              <Slot name="authorInstitution">
                <ValueList>
                  <Value>
                    Bodalla Clinic^^^^^^^^^1.2.36.1.2001.1003.0.8003620833337558
                  </Value>
                </ValueList>
              </Slot>
              <Slot name="authorPerson">
                <ValueList>
                  <Value>
                    ^Bagshaw^Todd^^^Dr.^^^^&amp;amp;1.2.36.1.2001.1003.0.8003614166668846&amp;amp;ISO
                  </Value>
                </ValueList>
              </Slot>
            </Classification>
            <Classification nodeRepresentation="60591-5" classifiedObject="DOCUMENT_SYMBOLICID_01" classificationScheme="
urn:uuid:41a5887f-8865-4c09-adf7-e362475b143a" objectType="urn:oasis:names:tc:ebxml-regrep:ObjectType:RegistryObject:Clas
sification" id="cl02">
              <Slot name="codingScheme">
                <ValueList>
                  <Value>LOINC</Value>
                </ValueList>
              </Slot>
              <Name>
                <LocalizedString value="Patient Summary"/>
              </Name>
            </Classification>
            <Classification nodeRepresentation="1.3.6.1.4.1.21367.2006.7.101" classifiedObject="DOCUMENT_SYMBOLICID_01" c
lassificationScheme="urn:uuid:f4f85eac-e6cb-4883-b524-f2705394840f" objectType="urn:oasis:names:tc:ebxml-regrep:ObjectTyp
e:RegistryObject:Classification" id="cl03">
              <Slot name="codingScheme">
                <ValueList>
                  <Value>PCEHR_DocAccessLevels</Value>
                </ValueList>
              </Slot>
              <Name>
                <LocalizedString value="NA"/>
              </Name>
            </Classification>
            <Classification nodeRepresentation="1.2.36.1.2001.1006.1.16565.1" classifiedObject="DOCUMENT_SYMBOLICID_01" c
lassificationScheme="urn:uuid:a09d5840-386c-46f2-b5ad-9c3699a4309d" objectType="urn:oasis:names:tc:ebxml-regrep:ObjectTyp
```

```
e:RegistryObject:Classification" id="cl04">
               <Slot name="codingScheme">
                 <ValueList>
                   <Value>PCEHR_FormatCodes</Value>
                 </ValueList>
               </Slot>
               <Name>
                 <LocalizedString value="SHS"/>
               </Name>
             </Classification>
             <Classification nodeRepresentation="8401" classifiedObject="DOCUMENT_SYMBOLICID_01" classificationScheme="urn
:uuid:f33fb8ac-18af-42cc-ae0e-ed0b0bdb91e1" objectType="urn:oasis:names:tc:ebxml-regrep:ObjectType:RegistryObject:Classif
ication" id="cl05">
               <Slot name="codingScheme">
                 <ValueList>
                   <Value>ANZSIC</Value>
                 </ValueList>
               </Slot>
               <Name>
                 <LocalizedString value="Hospitals (except Psychiatric Hospitals)"/>
               </Name>
             </Classification>
             <Classification nodeRepresentation="8401-6" classifiedObject="DOCUMENT_SYMBOLICID_01" classificationScheme="u
rn:uuid:cccf5598-8b07-4b77-a05e-ae952c785ead" objectType="urn:oasis:names:tc:ebxml-regrep:ObjectType:RegistryObject:Class
ification" id="cl06">
               <Slot name="codingScheme">
                 <ValueList>
                   <Value>ANZSIC</Value>
                 </ValueList>
               </Slot>
               <Name>
                 <LocalizedString value="Hospital (except psychiatric or veterinary hospitals)"/>
               </Name>
             </Classification>
             <Classification nodeRepresentation="60591-5" classifiedObject="DOCUMENT_SYMBOLICID_01" classificationScheme="
urn:uuid:f0306f51-975f-434e-a61c-c59651d33983" objectType="urn:oasis:names:tc:ebxml-regrep:ObjectType:RegistryObject:Clas
sification" id="cl07">
               <Slot name="codingScheme">
                 <ValueList>
                   <Value>LOINC</Value>
                 </ValueList>
               </Slot>
```

```
            <Name>
              <LocalizedString value="Patient Summary"/>
            </Name>
          </Classification>
          <ExternalIdentifier value="8003601243017717^^^&amp;1.2.36.1.2001.1003.0&amp;ISO" identificationScheme="urn:uu
id:58a6f841-87b3-4a3e-92fd-a8ffeff98427" registryObject="DOCUMENT_SYMBOLICID_01" objectType="urn:oasis:names:tc:ebxml-reg
rep:ObjectType:RegistryObject:ExternalIdentifier" id="ei01">
            <Name>
              <LocalizedString value="XDSDocumentEntry.patientId"/>
            </Name>
          </ExternalIdentifier>
          <ExternalIdentifier value="2.25.262862032047590226133261468079259904907" identificationScheme="urn:uuid:2e82c
1f6-a085-4c72-9da3-8640a32e42ab" registryObject="DOCUMENT_SYMBOLICID_01" objectType="urn:oasis:names:tc:ebxml-regrep:Obje
ctType:RegistryObject:ExternalIdentifier" id="ei02">
            <Name>
              <LocalizedString value="XDSDocumentEntry.uniqueId"/>
            </Name>
          </ExternalIdentifier>
        </ExtrinsicObject>
        <RegistryPackage objectType="urn:oasis:names:tc:ebxml-regrep:ObjectType:RegistryObject:RegistryPackage" id="SUB
SET_SYMBOLICID_01">
          <Slot name="submissionTime">
            <ValueList>
              <Value>20120625150912</Value>
            </ValueList>
          </Slot>
          <Classification nodeRepresentation="" classifiedObject="SUBSET_SYMBOLICID_01" classificationScheme="urn:uuid:
a7058bb9-b4e4-4307-ba5b-e3f0ab85e12d" id="cl08">
            <Slot name="authorInstitution">
              <ValueList>
                <Value>
                  Bodalla Clinic^^^^^^^^^1.2.36.1.2001.1003.0.8003620833337558
                </Value>
              </ValueList>
            </Slot>
            <Slot name="authorPerson">
              <ValueList>
                <Value>
                  ^Bagshaw^Todd^^^Dr.^^^^&amp;1.2.36.1.2001.1003.0.8003614166668846&amp;ISO
                </Value>
              </ValueList>
            </Slot>
```

```
            </Classification>
            <Classification nodeRepresentation="60591-5" classifiedObject="SUBSET_SYMBOLICID_01" classificationScheme="ur
n:uuid:aa543740-bdda-424e-8c96-df4873be8500" objectType="urn:oasis:names:tc:ebxml-regrep:ObjectType:RegistryObject:Classi
fication" id="cl09">
              <Slot name="codingScheme">
                <ValueList>
                  <Value>LOINC</Value>
                </ValueList>
              </Slot>
              <Name>
                <LocalizedString value="Patient Summary"/>
              </Name>
            </Classification>
            <ExternalIdentifier value="2.25.262862032047590226133261468079259904907" identificationScheme="urn:uuid:96fdd
a7c-d067-4183-912e-bf5ee74998a8" registryObject="SUBSET_SYMBOLICID_01" objectType="urn:oasis:names:tc:ebxml-regrep:Object
Type:RegistryObject:ExternalIdentifier" id="ei03">
              <Name>
                <LocalizedString value="XDSSubmissionSet.uniqueId"/>
              </Name>
            </ExternalIdentifier>
            <ExternalIdentifier value="1.2.36.1.2001.1003.0.8003620833337558" identificationScheme="urn:uuid:554ac39e-e3f
e-47fe-b233-965d2a147832" registryObject="SUBSET_SYMBOLICID_01" objectType="urn:oasis:names:tc:ebxml-regrep:ObjectType:Re
gistryObject:ExternalIdentifier" id="ei04">
              <Name>
                <LocalizedString value="XDSSubmissionSet.sourceId"/>
              </Name>
            </ExternalIdentifier>
            <ExternalIdentifier value="8003601243017717^^^&amp;1.2.36.1.2001.1003.0&amp;ISO" identificationScheme="urn:uu
id:6b5aea1a-874d-4603-a4bc-96a0a7b38446" registryObject="SUBSET_SYMBOLICID_01" objectType="urn:oasis:names:tc:ebxml-regre
p:ObjectType:RegistryObject:ExternalIdentifier" id="ei05">
              <Name>
                <LocalizedString value="XDSSubmissionSet.patientId"/>
              </Name>
            </ExternalIdentifier>
          </RegistryPackage>
          <Classification classificationNode="urn:uuid:a54d6aa5-d40d-43f9-88c5-b4633d873bdd" classifiedObject="SUBSET_SYM
BOLICID_01" objectType="urn:oasis:names:tc:ebxml-regrep:ObjectType:RegistryObject:Classification" id="cl10"/>
          <Association targetObject="DOCUMENT_SYMBOLICID_01" sourceObject="SUBSET_SYMBOLICID_01" associationType="urn:oas
is:names:tc:ebxml-regrep:AssociationType:HasMember" objectType="urn:oasis:names:tc:ebxml-regrep:ObjectType:RegistryObject
:Association" id="as01">
            <Slot name="SubmissionSetStatus">
              <ValueList>
```

```
                <Value>Original</Value>
              </ValueList>
            </Slot>
          </Association>
        </RegistryObjectList>
      </SubmitObjectsRequest>
      <Document id="DOCUMENT_SYMBOLICID_01">
        UEsDBBQAAA.............Ach0AAAAA
      </Document>
    </ProvideAndRegisterDocumentSetRequest>
  </s:Body>
</s:Envelope>
```

For an example of a document being **amended** with a ProvideAndRegisterDocumentRequest, see Appendix D.1.1.

7.2.1.2 Response

Name of Response: RegistryResponse

RegistryResponse

See section 3.3.1 of the PCEHR Document Exchange Service Using the IHE XDS.b Platform (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=184).

The outputs are as follows:

Table 13: RegisteryResponse message elements

Level 1 Element	Level 2 Element	Card	Explanation

Registry Response		1..1	Possible values
			`urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:Success`
			`urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:Failure`

Registry ErrorList		0..*	
	RegistryError	1..1	Attributes: codeContext: PCEHR_ERROR_XXXX – [Description] errorCode:`XDSRepositoryError`, `XDSRegistryError` or ATS5820 errorCodes severity: error, warning or error and warning location: location of the error

Example - Succesful

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
  <soap:Header xmlns:wsa="http://www.w3.org/2005/08/addressing">
    <wsa:Action>
      urn:ihe:iti:2007:ProvideAndRegisterDocumentSet-bResponse
    </wsa:Action>
    <wsa:MessageID>urn:uuid:ed4de9eb-ba92-4d29-88d4-4fb0be3c1660</wsa:MessageID>
    <wsa:RelatesTo>urn:uuid:fcad1ae4-9808-4459-ab9c-8e2d0aa24d4c</wsa:RelatesTo>
    <ns:signature ..........>
      ......................
```

```
    </ns:signature>
  </soap:Header>
  <soap:Body xmlns:wsa="http://www.w3.org/2005/08/addressing" xml:id="Id-0001336700567033-8bc7c7d54fac6e973eb9616c-2">
    <rs:RegistryResponse xmlns:rs="urn:oasis:names:tc:ebxml-regrep:xsd:rs:3.0" xmlns:env="http://www.w3.org/2003/05/soap-
envelope" status="urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:Success"/>
  </soap:Body>
</soap:Envelope>
```

Example - Error

```
<?xml version="1.0" encoding="utf 8"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap envelope">
  <soap:Header xmlns:wsa="http://www.w3.org/2005/08/addressing">
    <wsa:Action>urn:ihe:iti:2007:ProvideAndRegisterDocumentSet bResponse</wsa:Action>
    <wsa:MessageID>urn:uuid:aaa8a645 610d 4299 9e04 e03b1364c619</wsa:MessageID>
    <wsa:RelatesTo>urn:uuid:fabb2d3a ba07 4dd7 8b7a ce82ba1b2ab9</wsa:RelatesTo>
    <ns:signature>....</ns:signature>
  </soap:Header>
  <soap:Body xml:id="Id 0001337512612316 2ecac1224fb8d2a43a790000 2">
    <urn:RegistryResponse xmlns:urn="urn:oasis:names:tc:ebxml regrep:xsd:rs:3.0" status="urn:oasis:names:tc:ebxml regrep:
ResponseStatusType:Failure">
      <urn:RegistryErrorList highestSeverity="urn:oasis:names:tc:ebxml regrep:ErrorSeverityType:Error">
        <urn:RegistryError codeContext="PCEHR_ERROR_3001   Invalid document folder structure" errorCode="XDSRepositoryErr
or" severity="urn:oasis:names:tc:ebxml regrep:ErrorSeverityType:Error" location="PCEHR Interface"/>
      </urn:RegistryErrorList>
    </urn:RegistryResponse>
  </soap:Body>
</soap:Envelope>
```

Web Service Errors: see Appendix E.

Functional Errors

Table 14: Functional errors for RegisteryResponse

errorCode	contextCode	Explanation
XDSRepositoryError	PCEHR_ERROR_3001 - Invalid document folder structure	Document structure is not per XDS Packaging Specification, please refer to section 3.4
XDSRepositoryError	PCEHR_ERROR_3002 - Document metadata failed validation	Error in validating information PCEHR Header, XDS Metadata and CDA document.
XDSRepositoryError	PCEHR_ERROR_3003 - No metadata found	XDS Metadata is not found
XDSRepositoryError	PCEHR_ERROR_3004 - Invalid clinical document	Invalid CDA Document
XDSRepositoryError	PCEHR_ERROR_3005 - Document validation returned with errors and warnings. Details:<! [CDATA..%Validate Templates Response%]>	Template validation error and warning
XDSRepositoryError	PCEHR_ERROR_3006 -Document validation returned with errors. Details:<! [CDATA..%Validate Templates Response%]>	Template validation error
XDSRepositoryError	PCEHR_ERROR_3007 -Document validation returned warnings. Details:<! [CDATA..%Validate Templates Response%]>	Template validation warning
XDSRepositoryError	PCEHR_ERROR_3008 -Invalid template ID for PCEHR	Invalid Format Code

7.3 ITI-43 Retrieve Document Set

The PCEHR System uses ITI-43 Retrieve Document Set to allow client system to retrieve document from the PCEHR System.

7.3.1 RetrieveDocumentSetRequest

7.3.1.1 Request

Name of Request: RetrieveDocumentSetRequest

PCEHRHeader (see section 4.4)

RetrieveDocumentSetRequest

See section 3.3.2 of the PCEHR Document Exchange Service Using the IHE XDS.b Platform (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=184).

Table 15: RetrieveDocumentSetRequest message elements

Level 1 Element	Level 2 Element	Card	Explanation
RetrieveDocumentSetRequest		1..1	
	DocumentRequest	1..1	See *DocumentRequest*

Table 16: the DocumentRequest sub-elements

Level 1 Element	Level 2 Element	Card	Explanation
DocumentRequest		1..1	
	RepositoryUniqueId	1..1	OID of the document's repository
	DocumentUniqueId	1..1	XDSDocumentEntry.uniqueID of document. This will be an OID.

Coding Tips:

When populating the PCEHR Header make sure the *PCEHRHeader.ihiNumber* is the IHI number of the patient of the given *DocumentUniqueId*. Otherwise the PCEHR System will return, "PCEHR_ERROR_3002 - Document metadata failed validation" as the PCEHR System will validate the CDA Document patientId with the *PCEHRHeader.ihiNumber.*

Example

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope">
  <s:Header>
    <Action xmlns="http://www.w3.org/2005/08/addressing" xmlns:a="http://www.w3.org/2003/05/soap-envelope" a:mustUnderst
and="1">urn:ihe:iti:2007:RetrieveDocumentSet</Action>
    <h:PCEHRHeader xmlns:h="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns="http://ns.
electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" x
mlns:xsd="http://www.w3.org/2001/XMLSchema" xml:id="user-90ba0538-4052-4c65-9fe7-c09bca29505f">
      <User>
        <IDType>HPII</IDType>
        <ID>8003619166674595</ID>
        <userName>John Doe</userName>
        <useRoleForAudit>false</useRoleForAudit>
      </User>
      <ihiNumber>8003608833337025</ihiNumber>
      <productType>
        <vendor>Oracle</vendor>
        <productName>dummyCISusr1</productName>
        <productVersion>dummyCISusrV1</productVersion>
        <platform>Windows XP</platform>
      </productType>
      <clientSystemType>CIS</clientSystemType>
      <accessingOrganisation>
        <organisationID>8003626566674315</organisationID>
        <organisationName>Local Practice</organisationName>
      </accessingOrganisation>
    </h:PCEHRHeader>
    <h:signature ..................>
      ........................
    </h:signature>
    ........................
    <MessageID xmlns="http://www.w3.org/2005/08/addressing">urn:uuid:403d501b-7cd9-4116-b1f1-c8016d4b7eee</MessageID>
    ................
  </s:Header>
  <s:Body xml:id="body-ac285b42-af85-4135-9703-550731928093">
    <RetrieveDocumentSetRequest xmlns="urn:ihe:iti:xds-b:2007">
```

```
      <DocumentRequest>
        <RepositoryUniqueId>1.2.36.1.2001.1006.0.1.3.1</RepositoryUniqueId>
        <DocumentUniqueId>2.25.172688582738891283173538910007322793319</DocumentUniqueId>
      </DocumentRequest>
    </RetrieveDocumentSetRequest>
  </s:Body>
</s:Envelope>
```

7.3.1.2 Response

Response Name: RetrieveDocumentSetResponse

Table 17: RetrieveDocumentSertResponse message elements

Level 1 Element	Level 2 Element	Level 3 Element	Card	Explanation
RetrieveDocument SetResponse			1..1	

	status		1..1	Possible values:
				`urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:Success`
				`urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:Failure`

	Document Response		1..1	XDSDocumentEntry.uniqueID of document. This will be an OID.
		RepositoryUniqueId	1..1	Repository Unique Id
		DocumentUniqueId	1..1	Document Unique Id
		mimeType	1..1	Application/zip
		Document	1..1	Base64 representation of the CDA Package

Example

Sample RetrieveDocumentSetResponse given below. The entire message is a MTOM response, first part the XML component of the message, and the second part is the CDA package of the document, in octet-stream encoding (which has been omitted).

```
--MIME_Boundary
Content-ID: <a2767d6b9ec947febcb2d9875cb5b4aa>
Content-Type: application/xop+xml; type="application/soap+xml";
     charset=utf-8
Content-Transfer-Encoding: 8bit

<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
  <soap:Header xmlns:wsa="http://www.w3.org/2005/08/addressing">
    <wsa:Action>urn:ihe:iti:2007:RetrieveDocumentSetResponse</wsa:Action>
    <wsa:MessageID>urn:uuid:d73bce31-5371-4e87-9067-20a5bf72cffb</wsa:MessageID>
    <wsa:RelatesTo>urn:uuid:403d501b-7cd9-4116-b1f1-c8016d4b7eee</wsa:RelatesTo>
    <ns:signature ..................>
      ........................
    </ns:signature>
  </soap:Header>
  <env:Body xmlns:ns2="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0" xmlns:ns1="urn:oasis:names:tc:ebxml-regrep:xsd:rs:3.0
" xmlns:ns0="urn:ihe:iti:xds-b:2007" xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:env="http://www.w3.org/2003/05/so
ap-envelope" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xml:id="Id-0001339721074600-307edd274fda85725c090000-2
">
    <ns0:RetrieveDocumentSetResponse>
      <ns1:RegistryResponse status="urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:Success"/>
      <ns0:DocumentResponse>
        <ns0:RepositoryUniqueId>1.2.36.1.2001.1006.0.1.3.1</ns0:RepositoryUniqueId>
        <ns0:DocumentUniqueId>2.25.172688582738891283173538910007322793319</ns0:DocumentUniqueId>
        <ns0:mimeType>application/zip</ns0:mimeType>
        <ns0:Document>
          <inc:Include xmlns:inc="http://www.w3.org/2004/08/xop/include" href="cid:a7c55031c59c4b2fa338939efa8c702b"/>
        </ns0:Document>
      </ns0:DocumentResponse>
    </ns0:RetrieveDocumentSetResponse>
  </env:Body>
</soap:Envelope>

--MIME_Boundary
Content-Type: application/octet-stream
```

```
Content-Transfer-Encoding: binary
Content-Id: <a7c55031c59c4b2fa338939efa8c702b>

.............Binary of CDA package.................
--MIME_Boundary-
```

Functional Errors

Table 18: RetrieveDocumentSetResponse message functional errors

errorCode	contextCode	Explanation
XDSRepositoryError	PCEHR_ERROR_3002 - Document metadata failed validation	Error in validating information PCEHR Header, XDS Metadata and CDA document.
XDSRepositoryError	PCEHR_ERROR_3501 - No metadata found	XDS Metadata for a given document Id is not found
XDSRepositoryError	PCEHR_ERROR_3502 - Insufficient privileges to view the document	Access Denied
XDSRepositoryError	PCEHR_ERROR_3503 - Removed document not retrievable from PCEHR	Document has been removed

Web Service Errors: see Appendix E.

7.4 ITI-18 Registry Stored Query

The PCEHR System uses ITI-43 Retrieve Document Set to allow client system to find document and get index view from the PCEHR System.

7.4.1 AdHocQueryRequest

7.4.1.1 Request

Logical Set: findDocuments

Name of Request: AdhocQueryRequest

PCEHRHeader (see section 4.4).

AdhocQueryRequest:

See section 3.3.3.5 of the PCEHR Document Exchange Service Using the IHE XDS.b Platform (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=184).

Table 19: AdhocQueryRequest message inputs

Level 1 Element	Level 2 Element	Level 3 Element	Card	Explanation
AdhocQueryRequest			1..1	
	ResponseOption		1..1	
		returnType	1..1	Value is LeafClass
	AdhocQuery		1..1	Query Object, see section Appendix B for supported query type and their Ids
		Slots	1..*	Query parameter, see IHE XDS Spec 2a (Rev 8) for the supported query parameter

Coding Tips:

When populating the PCEHR Header make sure the `PCEHRHeader.ihiNumber` is the IHI number of the patient of the given `DocumentUniqueId` or have the same IHI number value when `XDSDocumentEntryPatientId` is provided. Otherwise the PCEHR System will return, "PCEHR_ERROR_3002 - Document metadata failed validation" as the PCEHR System will validate the CDA Document patientId with the `PCEHRHeader.ihiNumber`.

7.4.1.1 Query Types

Find Documents

Query Id: **urn:uuid:14d4debf-8f97-4251-9a74-a90016b0af0d**

Usage: This is used to find documents in the PCEHR Document Registry

Table 20: Find Documents request parameters

AdhocQueryRequest				
Field	Data Type	Explanation	Cardinality	Wildcards allowed
$XDSDocumentEntryPatientId	String	The Indiviudal IHI number that is within the document that was submitted to the PCEHR System	1..1	N/A
$XDSSubmissionSetSubmissionTimeFrom	UTC date	The date and time that the document was submitted to the PCEHR System. If this parameter is supplied the query will only return documents submitted on or after this time.	0..1	No

AdhocQueryRequest

Field	Data Type	Explanation	Cardinality	Wildcards allowed
$XDSDocumentEntryClassCode	String	A code relating to the type of document being searched for. If this parameter is supplied the query will only return documents which were asserted as being of this type when submitted.	0..*	No
$XDSDocumentEntryFormatCode	OID	The identifier of the template this document conforms to. If this parameter is supplied the query will only return documents which were asserted as conforming to this Template ID when submitted.	0..*	No
$XDSDocumentEntryCreationTimeFrom	UTC date	The UTC datetime that the document was created. If this parameter is supplied the query will only return documents created on or after this time.	0..1	No
$XDSDocumentEntryStatus	String	This Document Status. This must be set to ('urn:oasis:names:tc:ebxml-regrep:StatusType:Approved') and ('urn:ordreq:names:statusType:Deleted') The latter permits the author to view his or her deleted documents	1..*	No
$XDSDocumentEntryAuthorPerson	String	This may be a local CIS user ID or a HPI-I or PCEHR System Operator User Id. If this parameter is supplied the query will only return documents which were associated with this HPI-I or user identifier on submission	0..1	No

AdhocQueryRequest				
Field	Data Type	Explanation	Cardinality	Wildcards allowed
$XDSDocumentEntryHealthcareFacilityTypeCode	String	A code identifying the clinical specialty where the event relating to this document submission request initiated. If this parameter is supplied the query will only return documents which were associated with this Clinical Specialty Type on submission	0..1	No

For an example of a FindDocuments query and response, see Appendix D.2.1.

Get Documents

Query Id: **urn:uuid:5c4f972b-d56b-40ac-a5fcc8ca9b40b9d4**

Usage: This is used to get a single document registry information. This is mainly to be used to facilitate the replace document operation where the latest registry object Unique Id is needed.

Table 21: Get Documents request parameters

AdhocQueryRequest				
Field	Data Type	Explanation	Cardinality	Wildcards allowed
$XDSDocumentEntryUniqueId	String	The Document ID that was submitted to the PCEHR System	1..1	N/A

7.4.1.2 Response

Name of Response: AdhocQueryResponse

Output:

Table 22: adhocQueryResponse message elements

Level 1 Element	Level 2 Element	Card	Explanation

AdhocQueryResponse		1..1	Status
			`urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:Success`
			`urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:Failure`

	RegistryObjectList	1..*	List of Document Metadata, see RegistryObjectList in section 7.2.1

Functional Errors

Table 23: AdhocQueryResponse functional erros

errorCode	contextCode	Explanation
XDSRepositoryError	PCEHR_ERROR_3002 - Document metadata failed validation	Error in validating information PCEHR Header, XDS Metadata and CDA document.

Web Service Errors: see Appendix E.

7.5 removeDocument

PCEHR System's bespoke web service removeDocument logically deletes documents from the PCEHR System.

7.5.1 Request

Request Name: removeDocument

PCEHRHeader (see section 4.4).

removeDocument

See section 4.1.7 of the PCEHR Document Exchange Service Using the IHE XDS.b Platform (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=184).

Table 24: removeDocument inputs

Level 1 Element	Level 2 Element	Card	Explanation
RemoveDocument		1..1	
	DocumentId	1..1	Document Unique Id
	RemovalReason	1..1	Only "Withdrawn" is allowed for CIS and CSP

Coding Tips:

The full conformance points of the request are given in sections 3.3.4.1 & 3.3.4.2 of the PCEHR Document Exchange Service Using the IHE XDS.b Platform (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=184).

Only the author of the document is allowed to remove a document, the PCEHR System will validate the *PCEHRHeader.AccessingOrganisation.ID* with the authorInstitution of a given document uniqueId.

Example

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope">
  <s:Header>
    <Action xmlns="http://www.w3.org/2005/08/addressing" xmlns:a="http://www.w3.org/2003/05/soap-envelope" a:mustUnderstand="1">
      http://ns.electronichealth.net.au/pcehr/svc/RemoveDocument/1.1/RemoveDocumentPortType/removeDocumentRequest
    </Action>
    <h:PCEHRHeader xmlns:h="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema" xml:id="user-96221987-df7d-49ae-ab81-65e3f591b54b">
      <User>
        <IDType>HPII</IDType>
        <ID>8003619166674595</ID>
        <userName>John Doe</userName>
        <useRoleForAudit>false</useRoleForAudit>
      </User>
      <ihiNumber>8003608833337025</ihiNumber>
      <productType>
        <vendor>Oracle</vendor>
        <productName>dummyCISusr1</productName>
        <productVersion>dummyCISusrV1</productVersion>
        <platform>Windows XP</platform>
      </productType>
      <clientSystemType>CIS</clientSystemType>
      <accessingOrganisation>
        <organisationID>8003626566674315</organisationID>
        <organisationName>Local Practice</organisationName>
      </accessingOrganisation>
    </h:PCEHRHeader>
    <h:signature ..............>
      ..................
    </h:signature>
    ..................
    <MessageID xmlns="http://www.w3.org/2005/08/addressing">urn:uuid:d29ee08a-a869-4141-9d45-29271d0d15ad</MessageID>
    ..................
  </s:Header>
  <s:Body xml:id="body-412b274e-55d2-4e4a-8e3d-435d1f06e3de">
    <removeDocument xmlns="http://ns.electronichealth.net.au/pcehr/xsd/interfaces/RemoveDocument/1.0">
      <documentID>2.25.172688582738891283173538910007322793319</documentID>
      <reasonForRemoval>Withdrawn</reasonForRemoval>
    </removeDocument>
  </s:Body>
</s:Envelope>
```

7.5.2 Response

Name of Response: removeDocumentResponse

Outputs:

Table 25: RemoveDocumentResponse elements

Level 1 Element	Level 2 Element	Level 3 Elements	Card	Explanation
RemoveDocumentResponse			1..1	
	ResponseStatus		1..1	Success or failure
		Code	1..1	PCEHR_SUCCESS or PCEHR_ERROR_XXXX
		Description	1..1	Success or [Error Message]
		Details	0..*	

Example Success

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
  <soap:Header xmlns:wsa="http://www.w3.org/2005/08/addressing">
    <wsa:Action>
      http://ns.electronichealth.net.au/pcehr/svc/RemoveDocument/1.1/RemoveDocumentPortType/removeDocumentResponse
    </wsa:Action>
    <wsa:MessageID>urn:uuid:cb870c3b-8681-42db-a393-670857c5f105</wsa:MessageID>
    <wsa:RelatesTo>urn:uuid:d29ee08a-a869-4141-9d45-29271d0d15ad</wsa:RelatesTo>
    <ns:signature .....>
      ..................
    </ns:signature>
  </soap:Header>
  <S:Body xmlns:S="http://www.w3.org/2003/05/soap-envelope" xml:id="Id-0001339721276890-0419c3924fda863c01790000-2">
    <ns:removeDocumentResponse xmlns:ns="http://ns.electronichealth.net.au/pcehr/xsd/interfaces/RemoveDocument/1.0">
      <ns:responseStatus>
        <ns1:code xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">PCEHR_SUCCESS</ns
1:code>
        <ns1:description xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">Document i
s Successfully Removed</ns1:description>
        <ns1:details xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0"/>
      </ns:responseStatus>
```

```
    </ns:removeDocumentResponse>
  </S:Body>
</soap:Envelope>
```

Functional Errors

Table 26: RemoveDocumentresponse functional errors

Code	Description	Explanation
PCEHR_ERROR_3002	Document metadata failed validation	Error in validating information PCEHR Header, XDS Metadata and CDA document., i.e. `PCEHRHeader.ihiNumber` is not the same with the patientId of a given documentId.
PCEHR_ERROR_2501	Document is not found	Cannot find the given document unique Id.

Web Service Errors: see Appendix E.

Example Error

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap envelope">
  <soap:Header xmlns:wsa="http://www.w3.org/2005/08/addressing">
    <wsa:Action>
      http://ns.electronichealth.net.au/pcehr/svc/RemoveDocument/1.1/RemoveDocumentPortType/removeDocumentResponse
    </wsa:Action>
    <wsa:MessageID>urn:uuid:4b546516 e855 4195 9724 32c58968684b</wsa:MessageID>
    <wsa:RelatesTo>urn:uuid:85c74599 3a03 402e ad6f a6f7f009acde</wsa:RelatesTo>
    ..................
  </soap:Header>
  <S:Body xmlns:S="http://www.w3.org/2003/05/soap envelope" xml:id="Id 0001336700792591 a7e0692d4fac6f782d19e4fc 2">
    <ns1:removeDocumentResponse xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/interfaces/RemoveDocument/1.0">
      <ns1:responseStatus>
        <ns2:code xmlns:ns2="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">PCEHR_ERROR_2501<
/ns2:code>
        <ns2:description xmlns:ns2="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">Document n
ot found</ns2:description>
      </ns1:responseStatus>
    </ns1:removeDocumentResponse>
  </S:Body>
</soap:Envelope>
```

8 View Service

8.1 Overview

The View Service provides a mechanism for conformant external systems to retrieve a series of predefined views for an individual's PCEHR. Upon request, the PCEHR System supplies a collection of related data specific to a given role.

8.2 getConsolidatedView

The getConsolidatedView operation is responsible for returning the constructed representation of the consolidated view from the PCEHR System. The data extracted for the consolidated view from clinical documents is dependent on the requestor's access rights.

8.2.1 Request

Request Name: getConsolidatedView

Inputs:

PCEHRHeader (see section 4.4).

The `ihiNumber` and the `accessingOrganisation.organisationID` must be set in the PCEHR Header.

getConsolidatedView

See section 3.2.2 of the PCEHR View Service Technical Services Specification.

(https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=180)

Table 27: getConsolidatedView inputs

Element	Explanation
getConsolidatedView	Must be `null`

Example

In this request, when the IHI number is quoted, the accessing organisation has access to at least some of the PCEHR and the Client System Type is a Clinical Information System.

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope">
  <s:Header>
    <Action xmlns="http://www.w3.org/2005/08/addressing" xmlns:a="http://www.w3.org/2003/05/soap-envelope">
      http://ns.electronichealth.net.au/pcehr/svc/GetConsolidatedView/1.1/GetConsolidatedViewPortType/getConsolidatedVie
wRequest
    </Action>
    <h:PCEHRHeader xmlns:h="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns="http://ns.
electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" x
mlns:xsd="http://www.w3.org/2001/XMLSchema" xml:id="user-33de5376-23e7-4d8f-9316-f7c5f5260788">
      <User>
        <IDType>HPII</IDType>
        <ID>8003619166674595</ID>
        <userName>John Doe</userName>
        <useRoleForAudit>false</useRoleForAudit>
      </User>
      <ihiNumber>8003601243017717</ihiNumber>
      <productType>
        <vendor>Oracle</vendor>
        <productName>dummyCISusr1</productName>
        <productVersion>dummyCISusrV1</productVersion>
        <platform>Windows XP</platform>
      </productType>
      <clientSystemType>CIS</clientSystemType>
      <accessingOrganisation>
        <organisationID>8003620833337558</organisationID>
        <organisationName>Local Practice</organisationName>
      </accessingOrganisation>
    </h:PCEHRHeader>
    <h:signature xmlns:h="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns="http://ns.el
ectronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">
      ..............................
    </h:signature>
    ..................
    <MessageID xmlns="http://www.w3.org/2005/08/addressing">urn:uuid:c6ba76c4-d2d6-40fe-988f-3ef7951d92e3</MessageID>
    ................
  </s:Header>
  <s:Body xml:id="body-c7af4aa6-b1cf-4cdd-a437-21ce63d33aa8">
    <getConsolidatedView xmlns="http://ns.electronichealth.net.au/pcehr/xsd/interfaces/GetConsolidatedView/1.0"/>
  </s:Body>
</s:Envelope>
```

8.2.2 Response

Name of Response: getConsolidatedViewResponse

Table 28: getConsolidatedViewResponse message elements

getConsolidatedViewResponse Elements		Explanation
PCEHRRecord	consolidatedView	The record, as a CDA package, in Base64 encoding.
responseStatus	code	Possible values: PCEHR_SUCCESS | PCEHR_ERROR_6501
	description	SUCCESS | Consolidated view could not be generated
	details	Additional detail of the response

Example

Example of a successful response (where most of the Base64 encoded CDA package has been omitted):

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
  <soap:Header xmlns:wsa="http://www.w3.org/2005/08/addressing">
    <wsa:Action>
      http://ns.electronichealth.net.au/pcehr/svc/GetConsolidatedView/1.1/GetConsolidatedViewPortType/getConsolidatedVie
wResponse
    </wsa:Action>
    <wsa:MessageID>urn:uuid:b4d72fba-4a3e-4964-a4fd-6d3cbf59dd57</wsa:MessageID>
    <wsa:RelatesTo>urn:uuid:c6ba76c4-d2d6-40fe-988f-3ef7951d92e3</wsa:RelatesTo>
    <ns:signature xmlns:ns="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">
      ..........
    </ns:signature>
  </soap:Header>
  <soap:Body xml:id="Id-0001340071204386-4bb50fa14fdfdd2405690000-2">
    <ns:getConsolidatedViewResponse xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ns="http://ns.electroniche
```

```
alth.net.au/pcehr/xsd/interfaces/GetConsolidatedView/1.0">
      <ns:responseStatus>
        <ns1:code xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">PCEHR_SUCCESS</n
s1:code>
        <ns1:description xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0"/>
      </ns:responseStatus>
      <ns:PCEHRRecord>
        <ns:consolidatedView>PG5zMjp.....D48bnMy</ns:consolidatedView>
      </ns:PCEHRRecord>
    </ns:getConsolidatedViewResponse>
  </soap:Body>
</soap:Envelope>
```

Functional Errors

If an individual IHI Number is not used in the PCEHR Header when submitting a get consolidated view request to the PCEHR System, an error message PCEHR_ERROR_0004 - Authorisation denied appears in the PCEHR System response. See Appendix E.

The functional errors for the View Service responses are given below in Table 29.

Table 29: View Service functional errors

errorCode	contextCode	Explanation
PCEHR_SUCCESS	SUCCESS	The PCEHR System returns a successful result to the query.
PCEHR_ERROR_1600	Too many entries found	This is a getAuditView Functional Error. The selected search range is too large.
PCEHR_ERROR_3002	Document metadata failed validation	This is a getDocumentList Standard Error/XDS.b Error. The description of the a document is not valid.
PCEHR_ERROR_6501	Consolidated view could not be generated	This is a getConsolidatedView Functional Error from the PCEHR System.
PCEHR_ERROR_6001	No representatives found	This is a getRepresentativeList Functional Error from the PCEHR System. (This view is not yet implemented.)

errorCode	contextCode	Explanation
PCEHR_ERROR_5101	PCEHR not found	This is a getIndividualDetailsView OSB Functional Error from the PCEHR System (This view is not yet implemented.)
XDSRegistryError	PCEHR_ERROR_3002 – Document metadata failed validation	getDocumentList Standard Error/XDS.b Error

Example:

Here is an example of an unauthorised access to a consolidated view.

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
  <soap:Header>
    <wsa:Action xmlns:wsa="http://www.w3.org/2005/08/addressing">
      http://ns.electronichealth.net.au/pcehr/svc/PCEHRProfile/1.1/PCEHRProfilePortType/Fault/standardError
    </wsa:Action>
    <wsa:MessageID xmlns:wsa="http://www.w3.org/2005/08/addressing">
      uuid:Id-0001340084760039-b602069b4fe0121803090000-1
    </wsa:MessageID>
    <wsa:RelatesTo xmlns:wsa="http://www.w3.org/2005/08/addressing">urn:uuid:d5fbe1ae-5423-46cf-ae66-bd6eb97d715e</wsa:R
elatesTo>
  </soap:Header>
  <soap:Body>
    <soap:Fault>
      <soap:Code>
        <soap:Value>soap:Sender</soap:Value>
      </soap:Code>
      <soap:Reason>
        <soap:Text xml:lang="en-AU">PCEHR_ERROR</soap:Text>
      </soap:Reason>
      <soap:Detail>
        <ns2:standardError xmlns:ns2="http://ns.electronichealth.net.au/wsp/xsd/StandardError/2010">
          <ns2:errorCode>notAuthorised</ns2:errorCode>
          <ns2:message>PCEHR_ERROR_0004 - Authorisation denied</ns2:message>
        </ns2:standardError>
      </soap:Detail>
    </soap:Fault>
  </soap:Body>
</soap:Envelope>
```

8.3 getChangeHistoryView

The getChangeHistoryView service operation provides a list of document metadata that has been registered to the PCEHR System for a specific document. It provides a view of all the versions of a specific document. The view will be sensitive to the requestor's access rights and the associated access sensitivity of each document.

8.3.1 Request

Name of Request: getChangeHistoryView

Inputs:

PCEHRHeader (see section 4.4).

The `ihiNumber` and the `accessingOrganisation.organisationID` must be set in the PCEHR Header.

getChangeHistoryView

See section 3.2.3 of the PCEHR View Service Technical Services Specification.

(https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=180)

Table 30: getChangeHistoryView inputs

getChangeHistoryView Elements	Explanation
documentID	XDSDocumentEntry.uniqueID of document. This will be an OID.

Example

Here an accessing organisation requests a Change History View for a specified IHI number and document ID.

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope">
  <s:Header>
    <Action xmlns="http://www.w3.org/2005/08/addressing" xmlns:a="http://www.w3.org/2003/05/soap-envelope" a:mustUnderstand="1">
      http://ns.electronichealth.net.au/pcehr/svc/GetChangeHistoryView/1.1/GetChangeHistoryViewPortType/getChangeHistoryViewRequest
    </Action>
    <h:PCEHRHeader xmlns:h="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xml
```

```
ns:xsd="http://www.w3.org/2001/XMLSchema" xml:id="user-3991a0b8-e346-4719-a74d-fb86470abe66">
      <User>
        <IDType>HPII</IDType>
        <ID>8003619166674595</ID>
        <userName>John Doe</userName>
        <useRoleForAudit>false</useRoleForAudit>
      </User>
      <ihiNumber>8003601243017717</ihiNumber>
      <productType>
        <vendor>Oracle</vendor>
        <productName>dummyCISusr1</productName>
        <productVersion>dummyCISusrV1</productVersion>
        <platform>Windows XP</platform>
      </productType>
      <clientSystemType>CIS</clientSystemType>
      <accessingOrganisation>
        <organisationID>8003620833337558</organisationID>
        <organisationName>Local Practice</organisationName>
      </accessingOrganisation>
    </h:PCEHRHeader>
    <h:signature ............>
      ..............
    </h:signature>
    ..............
    <MessageID xmlns="http://www.w3.org/2005/08/addressing">urn:uuid:35a7cd17-66c5-4780-a59f-cdd70ce6ef10</MessageID>
    ..............
  </s:Header>
  <s:Body xml:id="body-50fe0065-bde1-4e94-a458-6ad3ea16433a">
    <getChangeHistoryView xmlns="http://ns.electronichealth.net.au/pcehr/xsd/interfaces/GetChangeHistoryView/1.0">
      <documentID xmlns="">urn:uuid:87990e0b-9349-4a4c-83e8-d4b894a0b215</documentID>
    </getChangeHistoryView>
  </s:Body>
</s:Envelope>
```

8.3.2 Response

Response Name: getChangeHistoryResponse

Table 31:getChangeHistoryResponse elements

getChangeHistoryResponse Element		Explanation
adhocQueryResponse		Multiple instances Attribute: `nillable=true` See section 7.4 for details on the adhocQueryResponse and its elements
	registeryObjectList	See Appendix D.2 for details on the XDS element set listed in registeryObjectList

Example

Here is an example of a response to a successful request. The extrinsic objects (i.e. the document metadata sets for the documents) have been removed. See the code sample starting on page 45 for a full extrinsic object. The structure of extrinsic object and the relationship of these elements to the XDS.b standard are given in in the XDS Submission set table on page 43.

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
  <soap:Header xmlns:wsa="http://www.w3.org/2005/08/addressing">
    <wsa:Action>
      http://ns.electronichealth.net.au/pcehr/svc/GetChangeHistoryView/1.1/GetChangeHistoryViewPortType/getChangeHistory
ViewResponse
    </wsa:Action>
    <wsa:MessageID>urn:uuid:32fceed7-e1a4-45cc-a72f-16f683b927b2</wsa:MessageID>
    <wsa:RelatesTo>urn:uuid:35a7cd17-66c5-4780-a59f-cdd70ce6ef10</wsa:RelatesTo>
    <ns:signature ..............>
      ............
    </ns:signature>
  </soap:Header>
  <soap:Body xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xml:id="Id-0001340255872204-f89cb9a14fe2ae8017590000-2"
>
    <ns:getChangeHistoryViewResponse xmlns:ns="http://ns.electronichealth.net.au/pcehr/xsd/interfaces/GetChangeHistoryVi
ew/1.0">
      <AdhocQueryResponse status="urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:Success">
```

```
        <ns4:RegistryObjectList xmlns:ns2="urn:hl7-org:v3" xmlns:ns4="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0" xmlns
:ns3="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0" xmlns:ns5="urn:oasis:names:tc:ebxml-regrep:xsd:rs:3.0" xm
lns:ns6="http://common.htb.ws.pcehr.au/" xmlns:ns7="http://common.pna.ws.pcehr.au/" xmlns:ns8="http://view.htb.ws.pcehr.
au/">
          <ns4:ExtrinsicObject isOpaque="false" mimeType="application/zip" status="urn:oasis:names:tc:ebxml-regrep:Statu
sType:Deprecated" objectType="urn:uuid:7edca82f-054d-47f2-a032-9b2a5b5186c1" lid="urn:uuid:d4e514c1-c5a7-4764-9ffb-35c36
598c921" id="urn:uuid:d4e514c1-c5a7-4764-9ffb-35c36598c921">
            <ns4:Slot name="creationTime">
              <ns4:ValueList>
                <ns4:Value>201112011100</ns4:Value>
              </ns4:ValueList>
            </ns4:Slot>
            <ns4:Slot name="hash">
              <ns4:ValueList>
                <ns4:Value>cd64eb3a2adc1fd2da2dc5bb905c0cae40eeb604</ns4:Value>
              </ns4:ValueList>
            </ns4:Slot>
            ..................
            </ns4:ExternalIdentifier>
          </ns4:ExtrinsicObject>
          <ns4:ExtrinsicObject isOpaque="false" mimeType="application/zip" status="urn:oasis:names:tc:ebxml-regrep:Statu
sType:Approved" objectType="urn:uuid:7edca82f-054d-47f2-a032-9b2a5b5186c1" lid="urn:uuid:87990e0b-9349-4a4c-83e8-d4b894a
0b215" id="urn:uuid:87990e0b-9349-4a4c-83e8-d4b894a0b215">
            <ns4:Slot name="creationTime">
              <ns4:ValueList>
                <ns4:Value>201112011100</ns4:Value>
              </ns4:ValueList>
            </ns4:Slot>
            <ns4:Slot name="hash">
              <ns4:ValueList>
                <ns4:Value>dce01ef28118796f8fa4de9ef3c40ec6d2a15135</ns4:Value>
              </ns4:ValueList>
            </ns4:Slot>
            ...........
          </ns4:ExtrinsicObject>
        </ns4:RegistryObjectList>
      </AdhocQueryResponse>
    </ns:getChangeHistoryViewResponse>
  </soap:Body>
</soap:Envelope>
```

Functional Errors

If a get change history view operation is performed without a valid HPI-O, a PCEHR_ERROR_0505 - Invalid HPI-O error is received from the PCEHR System.

For the functional error codes for the View Service, see Table 29 on page 74.

Example:

This error message has been encountered in the field. No metadata was not sent in the request. The error is thought to reflect database corruption.

```
<?xml version="1.0" encoding="UTF-8"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
  <soap:Header><wsa:Action xmlns:wsa="http://www.w3.org/2005/08/addressing">http://ns.electronichealth.net.au/pcehr/svc/
GetChangeHistoryView/1.1/GetChangeHistoryViewPortType/Fault/standardError</wsa:Action><wsa:MessageID xmlns:wsa="http://w
ww.w3.org/2005/08/addressing">uuid:Id-0001340083729935-a22a11834fe00e1117f90000-1</wsa:MessageID><wsa:RelatesTo xmlns:ws
a="http://www.w3.org/2005/08/addressing">urn:uuid:16eb7191-561c-4110-b2ce-20f3eb79ed06</wsa:RelatesTo></soap:Header>
  <soap:Body>
    <soap:Fault>
      <soap:Code>
        <soap:Value>soap:Sender</soap:Value>
      </soap:Code>
      <soap:Reason>
        <soap:Text xml:lang="en-AU">PCEHR_ERROR</soap:Text>
      </soap:Reason>
      <soap:Detail>
        <ns2:standardError xmlns:ns2="http://ns.electronichealth.net.au/wsp/xsd/StandardError/2010">
          <ns2:errorCode>badParam</ns2:errorCode>
          <ns2:message>PCEHR_ERROR_3002 - Document metadata failed validation</ns2:message>
        </ns2:standardError>
      </soap:Detail>
    </soap:Fault>
  </soap:Body>
</soap:Envelope>
```

8.4 getAuditView

The getAudit operation is responsible for returning an audit trail from the audit logs of either a Healthcare Provider Organisation (HPI-O) or an individual (IHI). If the request is from a Healthcare provider Organisation, the PCEHR System provides all audit events for the provider across multiple PCEHRs. If the request is from an owner of a PCEHR, the PCEHR System provides audit events for the owner of the PCEHR.

The information provided is constraint by the requestor's access rights and role in the PCEHR system. The Healthcare Provider Organisation is able to access only a subset of an owner of a PCEHR audit events. Owners of PCEHRs are allowed to access all their audit events.

8.4.1 Request

Name of Request: getAuditView

Inputs:

PCEHRHeader (see section 4.4).

The `accessingOrganisation.organisationID` must be set and the `ihiNumber` left null in the PCEHR Header if the request is from an organisation.

Note: For Registered Consumer Portal only: if the request is from an individual, than the `ihiNumber` must be set and the `accessingOrganisation.organisationID` left null.

getAuditView

See section 3.2.4 of the PCEHR View Service Technical Services Specification.

(https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=180)

Table 32: getAuditHistoryView inputs

getAuditView Elements	Explanation
DateFrom	Sample: 2012-04-24T13:00:00+10:00
DateTo	Sample: 2012-04-24T15:00:00+10:00

The response will either give all the interactions of the organisation, regardless of IHI; or, all the interactions of the individual, regardless of organisation.

Example

Get audit view request example:

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope">
  <s:Header>
    <Action xmlns="http://www.w3.org/2005/08/addressing" xmlns:a="http://www.w3.org/2003/05/soap-envelope" a:mustUnderst
and="1">
      http://ns.electronichealth.net.au/pcehr/svc/GetAuditView/1.1/GetAuditViewPortType/getAuditViewRequest
    </Action>
    <h:PCEHRHeader xmlns:h="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns="http://ns.
electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" x
mlns:xsd="http://www.w3.org/2001/XMLSchema" xml:id="user-4ff354fb-b78b-4ef7-8a83-40e8ce3982e0">
      <User>
        <IDType>HPII</IDType>
        <ID>8003619166674595</ID>
        <userName>John Doe</userName>
        <useRoleForAudit>false</useRoleForAudit>
      </User>
      <productType>
        <vendor>Oracle</vendor>
        <productName>dummyCISusr1</productName>
        <productVersion>dummyCISusrV1</productVersion>
        <platform>Windows XP</platform>
      </productType>
      <clientSystemType>CIS</clientSystemType>
      <accessingOrganisation>
        <organisationID>8003620833337558</organisationID>
        <organisationName>Local Practice</organisationName>
      </accessingOrganisation>
    </h:PCEHRHeader>
    <h:signature .............>
      ..............
    </h:signature>
    ................
    <MessageID xmlns="http://www.w3.org/2005/08/addressing">urn:uuid:8763c2b8-c238-4f0e-be60-80cb29be3722</MessageID>
    ................
  </s:Header>
  <s:Body xml:id="body-e468c705-cb52-4faf-9cd5-be3b89b60bb8">
    <getAuditView xmlns="http://ns.electronichealth.net.au/pcehr/xsd/interfaces/GetAuditView/1.1">
      <dateFrom>2012-06-19T11:13:26.412463+10:00</dateFrom>
      <dateTo>2012-06-19T12:13:26.412463+10:00</dateTo>
    </getAuditView>
  </s:Body>
</s:Envelope>
```

8.4.2 Response

Name of Response: getAuditViewResponse.

Outputs:

Table 33: getAuditViewResponse elements

getAuditViewResponse Elements			**Explanation**
responseStatus	code		One of the codes given in Table 29 on page 74.
	description		The correcponding `contextCode` in Table 29 on page 74.
	details		Additional detail of the response
AuditView	EventTrail	AuditEvent	See Table 34 below.
LogEvent	messageLogLevel		`WARN | ERROR | DEBUG | FATAL | AUDIT | INFO`

Table 34: AuditEvent elements

AuditEvent Elements			**Explanation**
businessEvent			Unique internal event identifier.
eventTimeStamp			Business event date time
AuditEvent	participantDetails	providerID	HPI-I number with sub-elements: • providerName • accessingHPIO • accessingHPIOName • participatingHPIO

AuditEvent Elements			Explanation
		participatingHPIOName	HPI-O Name with sub-elements:: • userID • userName • displayRole
	accessedEntity	ihiNumber	The individual consumer's IHI
		ihiName	Name of the onsumer
		subjectType	The accessed document's subject type
		subject	The subject of the document
	participantAction	actionType	`Create | Read | Update | Delete`
		operationPerformed	B2B operation performed.
		reason	`Incorrect identity | medical inaccuracy | elect to remove | IHI status is deceased | no legal appointment authorised | no ownership of PCEHR | IHI not active | IHI not verified | terms and conditions were not accepted | death | withdrawal from participation`
		approvalDatetime	Approval date time
		approvalRole	Approval role
		approvalName	Approval name

AuditEvent Elements		Explanation
	statusPriorActivation	Status prior activation
accessConditions	accessLevel	`Self access | general access | limited access`
	accessPermission	`Permit | deny`
	accessConditions	`Open access | PACC access, PACCX access | emergency access | local consent access | authorised representative access | nominated representative access | incorrect code | local consent access | denied | access revoked`

Example

The following is a successful getAuditViewResponse

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
  <soap:Header xmlns:wsa="http://www.w3.org/2005/08/addressing">
    <wsa:Action>
      http://ns.electronichealth.net.au/pcehr/svc/GetAuditView/1.1/GetAuditViewPortType/getAuditViewResponse
    </wsa:Action>
    <wsa:MessageID>urn:uuid:36c6d967-6e14-4644-a6fd-3389f748efc8</wsa:MessageID>
    <wsa:RelatesTo>urn:uuid:8763c2b8-c238-4f0e-be60-80cb29be3722</wsa:RelatesTo>
    <ns:signature ..........>
      ..............
    </ns:signature>
  </soap:Header>
  <soap-env:Body xmlns:soap-env="http://www.w3.org/2003/05/soap-envelope" xml:id="Id-0001340072006889-12199f774fdfe04604
390000-2">
    <ns:getAuditViewResponse xmlns:ns="http://ns.electronichealth.net.au/pcehr/xsd/interfaces/GetAuditView/1.1">
      <ns:responseStatus>
        <ns1:code xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">PCEHR_SUCCESS</n
s1:code>
        <ns1:description xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">Records R
eturned: 2</ns1:description>
```

```
        <ns1:details xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">HealthCareOrg
anisationAuditHistoryView</ns1:details>
      </ns:responseStatus>
      <ns:auditView>
        <ns:eventTrail>
          <ns:businessEvent>getAuditView</ns:businessEvent>
          <ns:eventTimeStamp>2012-06-19T12:11:00.337+10:00</ns:eventTimeStamp>
          <ns:auditEvent>
            <ns:participantDetails>
              <ns1:accessingHPIO xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">8
003620833337558</ns1:accessingHPIO>
              <ns1:accessingHPIOName xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.
0">Local Practice</ns1:accessingHPIOName>
              <ns1:participatingHPIO xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.
0">8003620833337558</ns1:participatingHPIO>
              <ns1:participatingHPIOName xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElement
s/1.0">TestOrg1</ns1:participatingHPIOName>
            </ns:participantDetails>
            <ns:accessedEntity>
              <ns1:ihiNumber xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">80036
01243017717</ns1:ihiNumber>
              <ns1:subjectType xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">Doc
umentID</ns1:subjectType>
              <ns1:subject xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">urn:uui
d:e6c40098-367f-42d6-b2bd-aff3b3a17c1a</ns1:subject>
            </ns:accessedEntity>
            <ns:participantAction>
              <ns1:actionType xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">Read
</ns1:actionType>
              <ns1:operationPerformed xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1
.0">getChangeHistoryView</ns1:operationPerformed>
            </ns:participantAction>
            <ns:accessConditions/>
          </ns:auditEvent>
        </ns:eventTrail>
        <ns:eventTrail>
          <ns:businessEvent>getAuditView</ns:businessEvent>
          <ns:eventTimeStamp>2012-06-19T12:04:32.828+10:00</ns:eventTimeStamp>
          <ns:auditEvent>
            ..............
            <ns:accessConditions/>
          </ns:auditEvent>
        </ns:eventTrail>
      </ns:auditView>
    </ns:getAuditViewResponse>
  </soap-env:Body>
</soap:Envelope>
```

Functional Errors

If the Date To and Date From values are not provided in the get audit view request, a `PCEHR_ERROR_0003 – SOAP` body fault appears in the PCEHR System's response. See Appendix E.

For the functional error codes for the View Service, see Table 29 on page 74.

Example:

Here, the `ihiNumber` and `organisationID` were not populated in the PCEHR header of the request, resulting in the following response:

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
    <soap:Header>
        <wsa:Action xmlns:wsa="http://www.w3.org/2005/08/addressing">
            http://ns.electronichealth.net.au/pcehr/svc/GetAuditView/1.1/GetAuditViewPortType/Fault/standardError
        </wsa:Action>
        <wsa:MessageID xmlns:wsa="http://www.w3.org/2005/08/addressing">
            uuid:Id-0001337831614780-31298d5c4fbdb0be0f990000-1
        </wsa:MessageID>
        <wsa:RelatesTo xmlns:wsa="http://www.w3.org/2005/08/addressing">uuid:0597b198-9bd8-4140-8cc0-
89515bfeed66</wsa:RelatesTo>
    </soap:Header>
    <soap:Body>
        <soap:Fault>
            <soap:Code>
                <soap:Value>soap:Sender</soap:Value>
            </soap:Code>
            <soap:Reason>
                <soap:Text xml:lang="en-AU">PCEHR_ERROR</soap:Text>
            </soap:Reason>
            <soap:Detail>
                <ns2:standardError xmlns:ns2="http://ns.electronichealth.net.au/wsp/xsd/StandardError/2010">
                    <ns2:errorCode>badlyFormedMsg</ns2:errorCode>
                    <ns2:message>PCEHR_ERROR_0003 - SOAP body fault</ns2:message>
                </ns2:standardError>
            </soap:Detail>
        </soap:Fault>
    </soap:Body>
</soap:Envelope>
```

8.5 ITI-18 registryStoredQuery (getDocumentList)

The registry stored query is the operation that provides a list of clinical documents that exists in the PCEHR System for a PCEHR. This operation implements the concept of get document list view.

The ITI-18 query is also used in Document Exchange, and is more fully documented in section 7.4.

8.5.1 Request

For inputs, see section 7.4.1.

Example

This is a sample get indexed view request for a particular document (identified by the $XDSDocumentEntryPatientId slot). The request is identified as a get indexed view by being an AdhocQuery with an id attribute of `14d4debf-8f97-4251-9a74-a90016b0af0d` = findDocument (see Appendix B).

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope">
  <s:Header>
    <Action xmlns="http://www.w3.org/2005/08/addressing" xmlns:a="http://www.w3.org/2003/05/soap-envelope" a:mustUnderstand="1">urn:ihe:iti:2007:RegistryStoredQuery</Action>
    <h:PCEHRHeader xmlns:h="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema" xml:id="user-27e05478-ca98-483d-869f-7aeefe9a7a8a">
      <User>
        <IDType>HPII</IDType>
        <ID>8003619166674595</ID>
        <userName>John Doe</userName>
        <useRoleForAudit>false</useRoleForAudit>
      </User>
      <ihiNumber>8003601243017717</ihiNumber>
      <productType>
        <vendor>Oracle</vendor>
        <productName>dummyCISusr1</productName>
        <productVersion>dummyCISusrV1</productVersion>
        <platform>Windows XP</platform>
      </productType>
      <clientSystemType>CIS</clientSystemType>
      <accessingOrganisation>
        <organisationID>8003620833337558</organisationID>
        <organisationName>Local Practice</organisationName>
        <alternateOrganisationName>John Doe</alternateOrganisationName>
```

```
      </accessingOrganisation>
    </h:PCEHRHeader>
    <h:signature ..................>
      ...................
    </h:signature>
    ...................
    <MessageID xmlns="http://www.w3.org/2005/08/addressing">urn:uuid:18bca8ae-836d-453a-a79f-c760a03107d8</MessageID>
    ..................
  </s:Header>
  <s:Body xml:id="body-31d1a0eb-e6f6-4667-ac92-b3ca8ce03847">
    <AdhocQueryRequest xmlns="urn:oasis:names:tc:ebxml-regrep:xsd:query:3.0">
      <ResponseOption returnType="LeafClass"/>
      <AdhocQuery xmlns="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0" id="urn:uuid:14d4debf-8f97-4251-9a74-a90016b0af0d">
        <Slot name="$XDSDocumentEntryPatientId">
          <ValueList>
            <Value>'8003601243017717^^^&amp;amp;1.2.36.1.2001.1003.0&amp;amp;ISO'</Value>
          </ValueList>
        </Slot>
        <Slot name="$XDSDocumentEntryStatus">
          <ValueList>
            <Value>
              ('urn:oasis:names:tc:ebxml-regrep:StatusType:Approved')
            </Value>
          </ValueList>
        </Slot>
      </AdhocQuery>
    </AdhocQueryRequest>
  </s:Body>
</s:Envelope>
```

8.5.2 Response

Example

The successful sample response to the above registry stored query follows. For a full example of an extrinsic object, see the code sample on page 45, and for the structure of the Extrinsic Object see the tables on XDS Document Set starting on page 41

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
  <soap:Header>
    <wsa:Action xmlns:wsa="http://www.w3.org/2005/08/addressing">urn:ihe:iti:2007:RegistryStoredQueryResponse</wsa:Actio
n>
```

```
    <wsa:MessageID xmlns:wsa="http://www.w3.org/2005/08/addressing">
      uuid:Id-0001340071471898-7ec645ea4fdfde2f0c69ff17-1
    </wsa:MessageID>
    <wsa:RelatesTo xmlns:wsa="http://www.w3.org/2005/08/addressing">urn:uuid:18bca8ae-836d-453a-a79f-c760a03107d8</wsa:R
elatesTo>
    <soap:Header xmlns:wsa="http://www.w3.org/2005/08/addressing">
      <wsa:Action xmlns:a="http://www.w3.org/2003/05/soap-envelope" a:mustUnderstand="1">urn:ihe:iti:2007:RegistryStored
Query</wsa:Action>
      <wsa:MessageID>urn:uuid:227f1d98-a949-49ed-ab65-82b384d98516</wsa:MessageID>
      <wsa:RelatesTo>urn:uuid:18bca8ae-836d-453a-a79f-c760a03107d8</wsa:RelatesTo>
      <wsa:ReplyTo>
        <wsa:Address>http://www.w3.org/2005/08/addressing/anonymous</wsa:Address>
      </wsa:ReplyTo>
      <wsa:From>
        <wsa:Address>http://www.w3.org/2005/08/addressing/anonymous</wsa:Address>
      </wsa:From>
      <wsa:To xmlns:s="http://www.w3.org/2003/05/soap-envelope" s:mustUnderstand="1">https://144.140.140.218/getDocument
List</wsa:To>
    </soap:Header>
    <ns:signature .............>
        ..............
    </ns:signature>
  </soap:Header>
  <soap:Body xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xml:id="Id-0001340071471898-7ec645ea4fdfde2f0c69ff17-2"
>
    <ns8:AdhocQueryResponse xmlns:ns4="urn:hl7-org:v3" xmlns:ns3="http://common.pna.ws.pcehr.au/" xmlns:ns9="http://comm
on.htb.ws.pcehr.au/" xmlns:ns5="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0" xmlns:ns6="urn:oasis:names:tc:e
bxml-regrep:xsd:rim:3.0" xmlns:ns10="http://view.htb.ws.pcehr.au/" xmlns:ns7="urn:oasis:names:tc:ebxml-regrep:xsd:rs:3.0
" xmlns:ns8="urn:oasis:names:tc:ebxml-regrep:xsd:query:3.0" status="urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:S
uccess">
      <ns6:RegistryObjectList>
        <ns6:ExtrinsicObject isOpaque="false" mimeType="application/zip" status="urn:oasis:names:tc:ebxml-regrep:StatusT
ype:Approved" objectType="urn:uuid:7edca82f-054d-47f2-a032-9b2a5b5186c1" lid="urn:uuid:e6c40098-367f-42d6-b2bd-aff3b3a17
c1a" id="urn:uuid:e6c40098-367f-42d6-b2bd-aff3b3a17c1a">
          ..............
        </ns6:ExtrinsicObject>
      </ns6:RegistryObjectList>
    </ns8:AdhocQueryResponse>
  </soap:Body>
</soap:Envelope>
```

Functional Errors

If an invalid HPI-O is used when the get document list operation is performed, an XDSRegistry error (`PCEHR_ERROR_0505 - Invalid HPI-O`) is received from the PCEHR System.

For the functional error codes for the View Service, see Table 29 on page 74.

Example:

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
  <soap:Header>
    <wsa:Action xmlns:wsa="http://www.w3.org/2005/08/addressing">urn:ihe:iti:2007:RegistryStoredQueryResponse</wsa:Actio
n>
    <wsa:MessageID xmlns:wsa="http://www.w3.org/2005/08/addressing">
      uuid:Id-0001340083323011-66b99d394fe00c7b0d99eb03-1
    </wsa:MessageID>
    <wsa:RelatesTo xmlns:wsa="http://www.w3.org/2005/08/addressing">urn:uuid:6bb516a1-b7ec-4e39-9c5e-1d93b4df333b</wsa:R
elatesTo>
  </soap:Header>
  <soap:Body>
    <query:AdhocQueryResponse xmlns:query="urn:oasis:names:tc:ebxml-regrep:xsd:query:3.0" status="urn:oasis:names:tc:ebx
ml-regrep:ResponseStatusType:Failure">
      <rs:RegistryErrorList xmlns:rs="urn:oasis:names:tc:ebxml-regrep:xsd:rs:3.0">
        <rs:RegistryError codeContext="PCEHR_ERROR_0509 - SOAP header fault" errorCode="XDSRegistryError" severity="urn:
oasis:names:tc:ebxml-regrep:ErrorSeverityType:Error" location="PCEHR Interface"/>
      </rs:RegistryErrorList>
      <rim:RegistryObjectList xmlns:rim="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0"/>
    </query:AdhocQueryResponse>
  </soap:Body>
</soap:Envelope>
```

9 Template Service

9.1 Overview

The Template Service enables implementers and systems to obtain standardised specifications for clinical documents to be exchanged within the Australian healthcare community. The Template Service is responsible for managing and storing the data representations associated with all of the data formats stored within a Personally Controlled Electronic Health Record (PCEHR) system, but can also store specifications for clinical documents not associated with a PCEHR system.

The Template Service can be used to obtain information to validate and display documents conforming to a particular template. There are two methods by which this information could be obtained:

1. Manually via the Template Portal. The Template Portal allows a user to search for and download Template Packages. This allows developers, testers, and other interested parties, to obtain information needed for building and testing systems which handle documents in accordance with the template content. Information obtained from the Template Service in this way may be statically incorporated within software products at the coding stage, with no need to dynamically update the information in future.
2. The Template Service offers two services via the B2B interface which allow the same Template Packages to be dynamically obtained by connected systems. These interfaces also return additional metadata relevant to dynamic use.

NOTE: Once a Template Package has been published, the machine-usable components contained within it will never change, although the metadata may be updated. (See the Template Service Interface Logical Service Specification (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=151) This makes it possible to incorporate statically-obtained information into software and still interface successfully with systems utilising dynamic acquisition of the same information.

9.1.1 Template Definitions for Documents

The Template Packages contain the formal specifications relevant to the document. These are the same documents as published elsewhere, and can be used to confirm the version of the specification to which the Template Package conforms.

The template packages published for PCEHR system use all contain the applicable schema definitions. These are the CDA schema. See the Technical Package Technical Specification [Template_PKG] for details of the structure of the components within the package.

9.1.2 Template Support for Document Validation

The Template Packages contain validations relevant to a document conforming to the template. For the PCEHR Template Packages being published for the initial release, these are the same validations that are included in the CDA Validator published by the NEHTA CCA team. These validations are Schematron.

The Template Service does not provide any validation capabilities; it only houses the Template Packages which contain the validation criteria. Any system wishing to utilise validations to check the conformance of a document against the template, has to create its own validation engine to utilise the definitions. The U.S. Department of Commerce makes available a tool via the National Institute of Standards and Technology [NIST] which may be of use:

- http://xreg2.nist.gov/cda-validation/index.html

The template packages published for PCEHR use all contain the applicable schematron. See the Template Package Technical Specification [Template_PKG] for details of the structure of the components within the package.

9.1.3 Template support for Document Display

The Template Packages contain example stylesheets which can be used to display a document conforming to the template. This is the NEHTA sample generic CDA stylesheet.

See the Template Package Technical Specification [Template_PKG] for details of the structure of the components within the package.

9.2 getTemplate

9.2.1 Request

Name of request: getTemplate

This operation retrieves a Template Package by use of its identifying OID, along with additional PCEHR related usage metadata.

Inputs:

PCEHRHeader

getTemplate

See section 4 of the Template Service Interface Technical Service Specification (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=182) for the current list of the elements in the input, their data types, cardinality and the conformance requirements.

Table 35: getTemplate inputs

Inputs		Explanation
getTemplate		
	templateid	The OID identifying the template to be retrieved
	serviceRequestorOption	Possible values: `FullPackage` | `MachineUsable` Many packages contain large volumes of PDF files which are of no relevance for automated software use. Specifying `MachineUsable` causes the Service to return a Template Package from which these elements have been removed, reducing the volume of data to be transmitted and handled. **Note:** currently the MachineUsable option should be used. FullPackage has been blocked and results in a "PCEHR_ERROR_0004 - Authorisation denied" message.

The getTemplate request is executed with a known TemplateID in order to obtain the definition, validation or display rendering information. The request will also give information as to whether or not documents conforming to the Template are being accepted by the PCEHR System.

A Registered Repository, when these become available in later waves of implementation of the B2B, would execute the request based on the TemplateID being asserted by a document being stored. It would use the response in two ways:

1. To check whether or not the document can be submitted to the PCEHR System.
2. To validate the document for conformance against the template.

This checking and validation may also be performed by any clinical system that implements a process of dynamic document validation.

Validation may be performed even if the document is not to be submitted to the PCEHR System.

Where a document needs to be displayed or printed, any system may execute the request to obtain rendering information.

The fact that the components of the Template Package, other than the metadata, are constant – coupled with the size of the packages – means it is desirable to cache the results of a Template Package retrieval. To aid this, a PersistInCacheExipry date/time is returned, to facilitate caching results.

Example:

Here is an example of requesting a machine-readable form of a template package.

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope">
  <s:Header>
    <Action xmlns="http://www.w3.org/2005/08/addressing" xmlns:a="http://www.w3.org/2003/05/soap-envelope" a:mustUnderst
and="1">
      http://ns.electronichealth.net.au/tplt/svc/GetTemplate/1.1/GetTemplatePortType/getTemplateRequest
    </Action>
    <h:PCEHRHeader xmlns:h="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns="http://ns.
electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" x
mlns:xsd="http://www.w3.org/2001/XMLSchema" xml:id="user-b2a6ed7e-c6c7-457c-adbf-0aeec8c5c0f2">
      <User>
        <IDType>HPII</IDType>
        <ID>8003619166674595</ID>
        <userName>User1</userName>
        <useRoleForAudit>false</useRoleForAudit>
      </User>
      <productType>
        <vendor>Oracle</vendor>
        <productName>dummyCISusr1</productName>
        <productVersion>dummyCISusrV1</productVersion>
        <platform>Windows XP</platform>
      </productType>
      <clientSystemType>CIS</clientSystemType>
      <accessingOrganisation>
        <organisationID>8003620833337558</organisationID>
        <organisationName>Local Practice</organisationName>
        <alternateOrganisationName>Alternate Org Name</alternateOrganisationName>
      </accessingOrganisation>
    </h:PCEHRHeader>
    <h:signature ..............>
      ..................
    </h:signature>
    ...................
    <MessageID xmlns="http://www.w3.org/2005/08/addressing">urn:uuid:d27f7e98-ac27-4fec-8435-68768f7afb0a</MessageID>
    ...................
  </s:Header>
  <s:Body xml:id="body-8f2101b4-e4bd-475c-8ed4-278da996873c">
    <getTemplate xmlns="http://ns.electronichealth.net.au/tplt/xsd/interfaces/GetTemplate/1.0">
      <templateID>1.2.36.1.2001.1006.1.16565.1</templateID>
      <serviceRequestorOption>MachineUsable</serviceRequestorOption>
    </getTemplate>
  </s:Body>
</s:Envelope>
```

9.2.2 Response

Name of Response: getTemplateResponse

Outputs:

See section 4 of the Template Service Interface Technical Service Specification (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=182) for the current list of the elements in the output, their data types, cardinality and the conformance requirements.

Table 36: getTemplateResponse elements

Outputs		Explanation
getTemplateResponse		
	responseStatus	Complex. See below.
	template	Complex. See below.
	persistInCacheExpiry	The time after which the Template should be retrieved again to ensure any changes in metadata values are obtained.

Table 37: responseStatus elements

***responseStatus* elements**	**Explanation**
code	Status Code for the result of the transaction
description	Brief status description
details	Additional detail of the response

Table 38:template subelements

***template* elements**	**Explanation**

***template* elements**		**Explanation**
templateMetaData		Name/value pairs containing the metadata describing the template.
usageMetaData	PCEHRAcceptedStartDate	The time after which documents asserting conformance to this template can be submitted to the PCEHR.
	PCEHRAcceptedEndDate	The time after which documents asserting conformance to this template will no longer be accepted by the PCEHR.
	containsPCEHRAtomicData	Any indicator that the PCEHR System will attempt to find atomic data within documents conforming to this template in order to cache for the construction of views for the PCEHR.
Package		Base64 Binary encoding of the Template Package.

Example:

Here is the response to a machine-readable getTemplate request. Most of the template package has been omitted.

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
  <soap:Header xmlns:wsa="http://www.w3.org/2005/08/addressing">
    <wsa:Action>
      http://ns.electronichealth.net.au/tplt/svc/GetTemplate/1.1/GetTemplatePortType/getTemplateResponse
    </wsa:Action>
    <wsa:MessageID>urn:uuid:42ff21ee-4e47-42be-91db-e12f5c94fe14</wsa:MessageID>
    <wsa:RelatesTo>urn:uuid:d27f7e98-ac27-4fec-8435-68768f7afb0a</wsa:RelatesTo>
    <ns:signature ..................>
      ..................
    </ns:signature>
  </soap:Header>
  <S:Body xmlns:S="http://www.w3.org/2003/05/soap-envelope" xml:id="Id-0001340602427860-9206c6394fe7f83b10396c61-3">
    <ns:getTemplateResponse xmlns:ns="http://ns.electronichealth.net.au/tplt/xsd/interfaces/GetTemplate/1.0">
      <ns:responseStatus>
        <ns1:code xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">PCEHR_SUCCESS</n
s1:code>
        <ns1:description xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">SUCCESS</
ns1:description>
      </ns:responseStatus>
      <ns:template>
```

```
<ns:templateMetadata>
  <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
    <ns1:name>TemplateTypeCode</ns1:name>
    <ns1:value>60591-5</ns1:value>
  </ns1:metadata>
  <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
    <ns1:name>TemplateTypeCodeSystem</ns1:name>
    <ns1:value>2.16.840.1.113883.6.1</ns1:value>
  </ns1:metadata>
  <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
    <ns1:name>TemplateTypeCodeSystemName</ns1:name>
    <ns1:value>LOINC</ns1:value>
  </ns1:metadata>
  <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
    <ns1:name>TemplateTypeCodeDisplayName</ns1:name>
    <ns1:value>Patient summary</ns1:value>
  </ns1:metadata>
  <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
    <ns1:name>TemplateTypeTypeIdExtension</ns1:name>
    <ns1:value>POCD_HD000040</ns1:value>
  </ns1:metadata>
  <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
    <ns1:name>TemplateTypeTypeIdRoot</ns1:name>
    <ns1:value>2.16.840.1.113883.1.3</ns1:value>
  </ns1:metadata>
  <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
    <ns1:name>TemplateAdministrator</ns1:name>
    <ns1:value>CKM</ns1:value>
  </ns1:metadata>
  <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
    <ns1:name>TemplateClass</ns1:name>
    <ns1:value>ClinicalDocument</ns1:value>
  </ns1:metadata>
  <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
    <ns1:name>TemplateConformanceLevel</ns1:name>
    <ns1:value>3A</ns1:value>
  </ns1:metadata>
  <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
    <ns1:name>TemplateCustodian</ns1:name>
    <ns1:value>Nehta</ns1:value>
  </ns1:metadata>
  <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
```

```
            <ns1:name>TemplateDescription</ns1:name>
            <ns1:value>
              Shared Health Summary clinical document - conformance level 3A
            </ns1:value>
          </ns1:metadata>
          <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
            <ns1:name>TemplateDetailedDescription</ns1:name>
            <ns1:value>
              Template package for a PCEHR-conformant Shared Health Summary clinical document. Contains CDA implementati
on guide and schematrons for level 3A conformance checking.
            </ns1:value>
          </ns1:metadata>
          <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
            <ns1:name>TemplateFormatType</ns1:name>
            <ns1:value>CDA</ns1:value>
          </ns1:metadata>
          <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
            <ns1:name>TemplateFormatVersion</ns1:name>
            <ns1:value>2</ns1:value>
          </ns1:metadata>
          <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
            <ns1:name>TemplateID</ns1:name>
            <ns1:value>1.2.36.1.2001.1006.1.16565.1</ns1:value>
          </ns1:metadata>
          <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
            <ns1:name>TemplateKeyword</ns1:name>
            <ns1:value>CDA</ns1:value>
          </ns1:metadata>
          <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
            <ns1:name>TemplateKeyword</ns1:name>
            <ns1:value>Shared Health Summary</ns1:value>
          </ns1:metadata>
          <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
            <ns1:name>TemplateName</ns1:name>
            <ns1:value>Shared Health Summary</ns1:value>
          </ns1:metadata>
          <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
            <ns1:name>TemplateStatus</ns1:name>
            <ns1:value>Active</ns1:value>
          </ns1:metadata>
          <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
            <ns1:name>TemplateStatusEffectiveDate</ns1:name>
```

```
            <ns1:value>2012-05-31T00:00:00.000+10:00</ns1:value>
          </ns1:metadata>
          <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
            <ns1:name>TemplateVersion</ns1:name>
            <ns1:value>25</ns1:value>
          </ns1:metadata>
        </ns:templateMetadata>
        <ns:usageMetadata>
          <ns1:PCEHRAcceptedStartDate xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements
/1.0">2012-06-01T00:00:00.000+10:00</ns1:PCEHRAcceptedStartDate>
          <ns1:PCEHRAcceptedEndDate xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1
.0">2030-12-31T00:00:00.000+11:00</ns1:PCEHRAcceptedEndDate>
          <ns1:containsPCEHRAtomicData xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElement
s/1.0">false</ns1:containsPCEHRAtomicData>
        </ns:usageMetadata>
        <ns:package>
          UEsDB.............urgf+Uek
        </ns:package>
      </ns:template>
      <ns:persistInCacheExpiry>2012-06-28T23:59:59.782+10:00</ns:persistInCacheExpiry>
    </ns:getTemplateResponse>
  </S:Body>
</soap:Envelope>
```

Error

There are 2 type of error may be returned by the PCEHR System:

- **Standard Error**, the PCEHR System will return this error when there is a Web Services Error as per ATS5820 specification during the transaction. This error will be returned as SOAP Fault. See Appendix E.
- **Functional Error**, the PCEHR System will return this when there is a functional/business error during the transaction. This error will be return in the *responseStatus* within the SOAP Body. For a listing of these see Table 29.

Response Status Codes:

Table 39: getTemplateResponse functional elements

Status Code	Description	Suggested Action
PCEHR_SUCCESS	SUCCESS	The template package can be processed.
PCEHR_ERROR_1800	No Package	The package for the specified Template ID is not available for download. An error should be logged or displayed. The retrieval should not be retried.
PCEHR_ERROR_1801	Invalid Template ID	The Template Identifier is not present in the Template Service. This may be because the format of the identifier is invalid, or the template package is not present. An error should be logged or displayed. The retrieval should not be retried.

9.3 searchTemplate

9.3.1 Request

Name of request: searchTemplate

This operation searches for Template Packages using any combination of the metadata used for describing a template. See Section 3.3.1.1 of the Template Service Interface Logical Service Specification [Template_LSS] for an explanation of how the search function behaves.

Inputs:

PCEHRHeader

searchTemplate

See section 4.1.1.4 of the Template Service Interface Technical Service Specification [Template_TSS] for the current list of the elements in the input, their data types, cardinality and the conformance requirements.

Table 40:getTemplate inputs

Inputs		Explanation
searchTemplate		
	templateID	Optional OID identifying the template being searched for.
	templateMetaData	Optional Name / Value pairs specifying search criteria

The definitions and description of the metadata elements can be found in the Template Package Technical Specification [Template_PKG].

The `searchTemplate` is executed to discover information about Template Packages stored within the Template Service. It returns all the metadata for templates matching the search request, as well as additional metadata defining the current state of acceptance by the PCEHR System of documents conforming to the Template.

The ability to "search" using a known Template Identifier is provided to allow a mechanism to obtain the Metadata and PCEHR Usage criteria for a template without the overhead of having to fetch the entire package (which can be quite large, even when restricted to Machine Usable components only).

Any Clinical system or Registered Repository may execute a search to obtain Template Identification information and metadata. This may be used to:

1. To check whether or not a document can be submitted to the PCEHR System at this time
2. To find alternate templates for a Template which is no longer accepted by the PCEHR System
3. To find "lower" conformance level templates for a document which does not meet the validation requirements for a desired conformance level, but may nevertheless be suitable for submission to the PCEHR System.

A Clinical System which does not need to perform dynamic validation, but wants to check whether or not a document will be accepted by the PCEHR may use the `searchTemplate` request with a specific templateId in preference to the getTemplate, as the large quantity of data in the actual template Package may not be needed.

When the PCEHR system ceases accepting documents conforming to a particular template, it is almost certain that a replacement template will exist. The best replacement template may not necessarily be referenced by the templateSupersedingId metadata item, as there may be several possible replacements. Utilising other metadata items to perform a search enables these possible Template Packages to be discovered.

A document which cannot be submitted to the PCEHR System, either because the Template to which it conforms is no longer accepted by the PCEHR System, or because the document does not meet the validation criteria, may be able to meet the validation criteria for another acceptable template – and be submitted to the PCEHR system asserting conformance to that alternate template. Searching using appropriate metadata elements will allow discovery of the potential templates to be assessed.

Example:

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope">
  <s:Header>
    <Action xmlns="http://www.w3.org/2005/08/addressing" xmlns:a="http://www.w3.org/2003/05/soap-envelope" a:mustUnderst
and="1">
      http://ns.electronichealth.net.au/tplt/svc/SearchTemplate/1.1/SearchTemplatePortType/searchTemplateRequest
    </Action>
    <h:PCEHRHeader xmlns:h="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns="http://ns.
electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" x
mlns:xsd="http://www.w3.org/2001/XMLSchema" xml:id="user-0c27c6d9-d7cb-41dc-8917-c407ba306b55">
      <User>
        <IDType>HPII</IDType>
        <ID>8003619166674595</ID>
        <userName>User1</userName>
        <useRoleForAudit>false</useRoleForAudit>
      </User>
      <productType>
        <vendor>Oracle</vendor>
        <productName>dummyCISusr1</productName>
        <productVersion>dummyCISusrV1</productVersion>
        <platform>Windows XP</platform>
      </productType>
      <clientSystemType>CIS</clientSystemType>
      <accessingOrganisation>
        <organisationID>8003620833337558</organisationID>
        <organisationName>Local Practice</organisationName>
        <alternateOrganisationName>Alternate Org Name</alternateOrganisationName>
      </accessingOrganisation>
    </h:PCEHRHeader>
    <h:signature ..............>
      ..............
    </h:signature>
    ..................
    <MessageID xmlns="http://www.w3.org/2005/08/addressing">urn:uuid:31b6c8a4-fbb9-4b8f-99b2-69ed655e8c5d</MessageID>
    ..................
  </s:Header>
  <s:Body xml:id="body-27af16b2-d36a-4786-a68a-e16b3da31b2f">
    <searchTemplate xmlns="http://ns.electronichealth.net.au/tplt/xsd/interfaces/SearchTemplate/1.0">
      <templateID>1.2.36.1.2001.1006.1.16565.1</templateID>
    </searchTemplate>
  </s:Body>
</s:Envelope>
```

9.3.2 Response

Name of Response: getTemplateResponse

Outputs:

See section 4.1.2.1 of the Template Service Interface Technical Service Specification (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=182)for the current list of the elements in the output, their data types, cardinality and the conformance requirements.

Table 41: getTemplateResponse elements

Outputs		**Explanation**
searchTemplateResponse		
	responseStatus	Complex. See below.
	template	Complex. See below.

The components of the r*esponseStatus* element are:

***responseStatus* elements**	**Explanation**
code	Status Code for the result of the transaction
description	Brief status description
details	Additional detail of the response

Table 42: template elements

***template* elements**		**Explanation**
templateMetaData		Name / value pairs containing the metadata describing the template.
usageMetaData	PCEHRAcceptedStartDate	The time after which documents asserting conformance to this template can be submitted to the PCEHR.
	PCEHRAcceptedEndDate	The time after which documents asserting conformance to this template will no longer be accepted by the PCEHR.
	containsPCEHRAtomicData	Any indicator that the PCEHR System will attempt to find atomic data within documents conforming to this template in order to cache for the construction of views for the PCEHR.

Example:

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
  <soap:Header xmlns:wsa="http://www.w3.org/2005/08/addressing">
    <wsa:Action>
      http://ns.electronichealth.net.au/tplt/svc/SearchTemplate/1.1/SearchTemplatePortType/searchTemplateResponse
    </wsa:Action>
    <wsa:MessageID>urn:uuid:81af0584-837a-489d-8336-82b29bd86833</wsa:MessageID>
    <wsa:RelatesTo>urn:uuid:31b6c8a4-fbb9-4b8f-99b2-69ed655e8c5d</wsa:RelatesTo>
    <ns:signature ..................>
      ...................
    </ns:signature>
  </soap:Header>
  <S:Body xmlns:S="http://www.w3.org/2003/05/soap-envelope" xml:id="Id-0001339996492028-e28639494fdeb94c05c90000-2">
    <ns:searchTemplateResponse xmlns:ns="http://ns.electronichealth.net.au/tplt/xsd/interfaces/SearchTemplate/1.0">
      <ns:responseStatus>
        <ns1:code xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">PCEHR_SUCCESS</n
s1:code>
        <ns1:description xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">SUCCESS</
ns1:description>
      </ns:responseStatus>
      <ns:template>
        <ns:templateMetadata>
```

```
<ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
  <ns1:name>TemplateTypeCode</ns1:name>
  <ns1:value>60591-5</ns1:value>
</ns1:metadata>
<ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
  <ns1:name>TemplateTypeCodeSystem</ns1:name>
  <ns1:value>2.16.840.1.113883.6.1</ns1:value>
</ns1:metadata>
<ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
  <ns1:name>TemplateTypeCodeSystemName</ns1:name>
  <ns1:value>LOINC</ns1:value>
</ns1:metadata>
<ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
  <ns1:name>TemplateTypeCodeDisplayName</ns1:name>
  <ns1:value>Patient summary</ns1:value>
</ns1:metadata>
<ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
  <ns1:name>TemplateTypeTypeIdExtension</ns1:name>
  <ns1:value>POCD_HD000040</ns1:value>
</ns1:metadata>
<ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
  <ns1:name>TemplateTypeTypeIdRoot</ns1:name>
  <ns1:value>2.16.840.1.113883.1.3</ns1:value>
</ns1:metadata>
<ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
  <ns1:name>TemplateAdministrator</ns1:name>
  <ns1:value>CKM</ns1:value>
</ns1:metadata>
<ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
  <ns1:name>TemplateClass</ns1:name>
  <ns1:value>ClinicalDocument</ns1:value>
</ns1:metadata>
<ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
  <ns1:name>TemplateConformanceLevel</ns1:name>
  <ns1:value>3A</ns1:value>
</ns1:metadata>
<ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
  <ns1:name>TemplateCustodian</ns1:name>
  <ns1:value>Nehta</ns1:value>
</ns1:metadata>
<ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
  <ns1:name>TemplateDescription</ns1:name>
```

```
            <ns1:value>
              Shared Health Summary clinical document - conformance level 3A
            </ns1:value>
          </ns1:metadata>
          <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
            <ns1:name>TemplateDetailedDescription</ns1:name>
            <ns1:value>
              Template package for a PCEHR-conformant Shared Health Summary clinical document. Contains CDA implementati
on guide and schematrons for level 3A conformance checking.
            </ns1:value>
          </ns1:metadata>
          <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
            <ns1:name>TemplateFormatType</ns1:name>
            <ns1:value>CDA</ns1:value>
          </ns1:metadata>
          <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
            <ns1:name>TemplateFormatVersion</ns1:name>
            <ns1:value>2</ns1:value>
          </ns1:metadata>
          <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
            <ns1:name>TemplateID</ns1:name>
            <ns1:value>1.2.36.1.2001.1006.1.16565.1</ns1:value>
          </ns1:metadata>
          <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
            <ns1:name>TemplateKeyword</ns1:name>
            <ns1:value>CDA</ns1:value>
          </ns1:metadata>
          <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
            <ns1:name>TemplateKeyword</ns1:name>
            <ns1:value>Shared Health Summary</ns1:value>
          </ns1:metadata>
          <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
            <ns1:name>TemplateName</ns1:name>
            <ns1:value>Shared Health Summary</ns1:value>
          </ns1:metadata>
          <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
            <ns1:name>TemplateStatus</ns1:name>
            <ns1:value>Active</ns1:value>
          </ns1:metadata>
          <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
            <ns1:name>TemplateStatusEffectiveDate</ns1:name>
            <ns1:value>2012-05-31T00:00:00.000+10:00</ns1:value>
```

```
          </ns1:metadata>
          <ns1:metadata xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1.0">
            <ns1:name>TemplateVersion</ns1:name>
            <ns1:value>25</ns1:value>
          </ns1:metadata>
        </ns:templateMetadata>
        <ns:usageMetadata>
          <ns1:PCEHRAcceptedStartDate xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements
/1.0">2011-12-27T00:00:00.000+11:00</ns1:PCEHRAcceptedStartDate>
          <ns1:PCEHRAcceptedEndDate xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElements/1
.0">2020-12-27T00:00:00.000+11:00</ns1:PCEHRAcceptedEndDate>
          <ns1:containsPCEHRAtomicData xmlns:ns1="http://ns.electronichealth.net.au/tplt/xsd/common/TemplatesCoreElement
s/1.0">false</ns1:containsPCEHRAtomicData>
        </ns:usageMetadata>
      </ns:template>
    </ns:searchTemplateResponse>
  </S:Body>
</soap:Envelope>
```

Error

There are 2 types of error may be returned by the PCEHR System:

- **Standard Error**, the PCEHR System will return this error when there is a Web Services Error as per ATS5820 specification during the transaction. This error will be returned as SOAP Fault. See Appendix E.
- **Functional Error**, the PCEHR System will return this when there is a functional/business error during the transaction. This error will be returned in the *responseStatus* within the SOAP Body.

Response Status Codes:

Table 43: getTemplateResponse functional errors

Status Code	Description	Suggested action
PCEHR_SUCCESS	SUCCESS	The list of metadata for the matching templates can be processed.
PCEHR_ERROR_1802	No Search Item	Where a user interaction is occurring, a message should be displayed indicating that no results were found. The search may be retried with less restrictive search criteria to enable finding results which may be excluded by the submitted search criteria.
PCEHR_ERROR_1803	Invalid Search criteria	Where a user interaction is occurring, a message should be displayed indicating that the search criteria is invalid. This may be due to user input within fields (such as invalid logical requests), or the supply of unknown values for the "name" parameters. The search may be retried with different criteria.
PCEHR_ERROR_1804	Too many results found to be returned	Where a user interaction is occurring, a message should be displayed indicating that too many results matched the search criteria, and they cannot be returned. The search may be retried with more restrictive search criteria to reduce the number of matching results.

10 Registration

10.1 Overview

The PCEHR Assisted Registration operation provides the ability, when inputting via a Clinical Information System (CIS), for individuals, or their authorised representatives, to register for a PCEHR by providing either a verified IHI number or a set of demographic details.

The registerPCEHR operation will also provide the ability to give, on behalf of a consumer, the mandatory acceptance of the PCEHR application and consent declaration and to give the optional consent to import automatically into the consumer's PCEHR all existing and future MPB, PBS, ODR, ACIR Medicare documents.

10.2 registerPCEHR

10.2.1 Request

Name of Request: **registerPCEHR**

The registerPCEHR operation may be invoked for registering a PCEHR for an individual or a dependent child.

In both cases the identity will be matched by the PCEHR System using either the provided IHI number or by demographic details. Note that:

If the clientSystemType (in the PCEHR Header) is "CIS" (meaning Clinical Information System), then the IHI number shall be given.

Once this operation is invoked successfully, the individual will either be registered for a PCEHR or will receive an appropriate error message.

Inputs:

PCEHRHeader (see section 4.4).

registerPCEHR

See section 3 of *PCEHR Registration Service, Technical Service Specification* for the current list of the elements in the inputs, their data types, cardinality and the conformances.

Table 44: registerPCEHR inputs

Level 2 registerPCEHR Element	Level 3 Element	Level 4 Element	Level 5 Elements	Card	Explanation
individual				0..1	The individual is mandatory if the IHI number not passed in the header.
	demographics			1..1	
		Name		1..1	
			nameTitle	0.1	These are specified by Medicare and defined in the PCEHR_CommonTypes_Supplementary schema. A few examples: `MR | MRS | MS | DR | Nurse`
			familyName	1..1	Individual surname
			givenName	0..2	Individual given names
			nameSuffix	0..1	These are specified by Medicare and defined in the PCEHR_CommonTypes_Supplementary schema. A few examples: `ESQ | JNR | SNR | OA | MP | MD`
			usage	0..1	Possible Values `"M" | "N" | "O" | "B" | "L" | "R"` M = Maiden name N = New born name O = Other name (alias) B = Professional or business name L = Registered name (legal name) R = Reporting name

Level 2 registerPCEHR Element	Level 3 Element	Level 4 Element	Level 5 Elements	Card	Explanation
			preferred	0..1	`"true" | "false"`
			conditionalUse	0..1	String giving an integer value: e.g. `'1'`, `'2'`, `'3'`, etc.
		sex		1..1	`F | I | M | N` where: M=Male, F=Female, I=Intersex or Indeterminate, N=Not specified.
		dateOfBirth		1..1	
		medicareCardNumber		0..1	Individual Medicare Card Number
		medicareIRN		0..1	Individual Reference Number
		dvaFileNumber		0..1	DVA File Number
		militaryHealth Number		0..1	
	contactDetails				
		mobilePhoneNumber		0..1	
		emailAddress		0..1	
child					
	ihiNumber			0..1	Child's IHI number. Mandatory if the child demographics not given
	demographics			1..1	Mandatory if the child IHI number is not given

Level 2 registerPCEHR Element	Level 3 Element	Level 4 Element	Level 5 Elements	Card	Explanation
		Name		1..1	
			nameTitle	0.1	These are specified by Medicare and defined in the PCEHR_CommonTypes_Supplementary schema. A few examples: `MR | MRS | MS | DR | Nurse`
			familyName	1..1	Individual surname
			givenName	0..2	Individual given names
			nameSuffix	0..1	These are specified by Medicare and defined in the PCEHR_CommonTypes_Supplementary schema. A few examples: `ESQ | JNR | SNR | OA | MP | MD`
			usage	0..1	Possible Values `"M" | "N" | "O" | "B" | "L" | "R"` M = Maiden name N = New born name O = Other name (alias) B = Professional or business name L = Registered name (legal name) R = Reporting name
			preferred	0..1	`true | false`
			conditionalUse	0..1	String giving an integer value: e.g. `'1'`, `'2'`, `'3'`, etc.

Level 2 registerPCEHR Element	Level 3 Element	Level 4 Element	Level 5 Elements	Card	Explanation
		sex		1..1	`F | I | M | N` where: M=Male, F=Female, I=Intersex or Indeterminate , N=Not specified.
		dateOfBirth		1..1	
		medicareCardNumber		0..1	Individual Medicare Card Number
		medicareIRN		0..1	Individual Reference Number
		dvaFileNumber		0..1	DVA File Number
		militaryHealthNumber		0..1	
assertions				1..1	
	identityVerifiedByProvider			1..1	This is an assertion that the identity of the individual has been verified.
	versionOfTermsAndConditionsAgreed			1..1	Originally this determined the version of the Terms and Conditions to which the individual has agreed. However, the meaning of this field has changed. The inidvidual now makes an application and consent declaration. The version number of this is no longer relevant.
	IVCCommunicationMethod			1..1	`"email" | "sms" | "mail"`
	medicareConsent			1..1	`"true"` means all existing and future Medicare documents (MPB, PBS, ODR, ACIR) will be available in the PCEHR. `"false"` means that no Medicare

Level 2 registerPCEHR Element	Level 3 Element	Level 4 Element	Level 5 Elements	Card	Explanation
					documents will be available in the PCEHR.
	parentDeclaration			0..1	This flag is mandatory if the `child` block is given

Example

This request is for registering an individual

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope" xmlns:ns="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns:xd="http://www.w3.org/2000/09/xmldsig#" xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/interfaces/RegisterPCEHR/1.0">
    <soap:Header xmlns:wsa="http://www.w3.org/2005/08/addressing">
        <wsa:Action>
            http://ns.electronichealth.net.au/pcehr/svc/RegisterPCEHR/1.0/RegisterPCEHRPortType/registerPCEHRRequest
        </wsa:Action>
        <wsa:MessageID>uuid:c1d85dda-a150-423f-bc3a-8f30fc429f7b</wsa:MessageID>
        <wsa:To>https://10.81.144.5/registerPCEHR</wsa:To>
        <ns:PCEHRHeader xml:id="Id-1a59200a-3eea-4184-875e-0dda21322e63-1">
            <ns:User>
                <ns:IDType>HPII</ns:IDType>
                <ns:ID>3003601002356999</ns:ID>
                <!-- Optional: -->
                <ns:role>Individual</ns:role>
                <ns:userName>Medicare</ns:userName>
                <ns:useRoleForAudit>false</ns:useRoleForAudit>
            </ns:User>
            <!-- Optional: -->
            <ns:ihiNumber>8003603456799684</ns:ihiNumber>
            <ns:productType>
                <ns:vendor>Oracle</ns:vendor>
                <ns:productName>dummyCISusr1</ns:productName>
                <ns:productVersion>dummyCISusrV1</ns:productVersion>
                <ns:platform>Windows</ns:platform>
            </ns:productType>
            <ns:clientSystemType>CIS</ns:clientSystemType>
```

```
            <!-- Optional: -->
            <ns:accessingOrganisation>
                <ns:organisationID>8003634166668653</ns:organisationID>
                <ns:organisationName>Fairview</ns:organisationName>
            </ns:accessingOrganisation>
        </ns:PCEHRHeader>
        <ns:signature>
            <Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
                <SignedInfo>
                    <CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#">
                        <InclusiveNamespaces xmlns="http://www.w3.org/2001/10/xml-exc-c14n#" PrefixList=""/>
                    </CanonicalizationMethod>
                    <SignatureMethod Algorithm="http://www.w3.org/2000/09/xmldsig#rsa-sha1"/>
                    <Reference URI="#Id-1a59200a-3eea-4184-875e-0dda21322e63-1" Type="">
                        <DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"/>
                        <DigestValue>1IwWnHhn0mYFq9Y9W/Q87D9NKTs=</DigestValue>
                    </Reference>
                    <Reference URI="#Id-1a59200a-3eea-4184-875e-0dda21322e63-2" Type="">
                        <DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"/>
                        <DigestValue>BVLDcz5yFv491gZuRANKSVIigWc=</DigestValue>
                    </Reference>
                    <Reference URI="#Id-1a59200a-3eea-4184-875e-0dda21322e63-3" Type="">
                        <DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"/>
                        <DigestValue>du5lUj2ro8eCgczMG7VHxj5YFes=</DigestValue>
                    </Reference>
                </SignedInfo>
                <SignatureValue>
                    oxVuWAok6TLuTGI2M9aHnRfpWbZ91xbHlkZX1UctYNFLohl+WReQhRWdK4U5Fzxb0SV4cBs6qatE Q0q2HHS9oqS445tQYzXFh4QsJ
r5T+U1aB/TbDEdvEWmKH2eiQXrPXUISOumKpXiW2AIzTW00ttMW QaylKXgYfwxhmIaGMijTHq+bg0BLzo9f1PrNsrcfKfmQxqRPCUonk1GzPcBA3Acyt8fkAF
b3tyUx l+Dkg1umhS4n+We7f3VWI9A0PEEMhbu9xf7yZ+fv+sCr5DmjJo770v7qXOj7e1rX38KW0OWgQ1/H WnazPGzmVLDN956/dCPb4MeQ/V641KJsj59t/Q
==
                </SignatureValue>
                <KeyInfo>
                    <X509Data>
                        <X509Certificate>
                            MIIFqDCCBJCgAwIBAgIDBKyXMA0GCSqGSIb3DQEBBQUAMH8xCzAJBgNVBAYTAkFVMQwwCgYDVQQK EwNHT1YxGzAZBgNVB
AsTEk1lZGljYXJlIEF1c3RyYWxpYTFFMEMGA1UEAxM8VGVzdCBNZWRpY2Fy ZSBBdXN0cmFsaWEgT3JnYW5pc2F0aW9uIENlcnRpZmljYXRpb24gQXV0aG9yaX
R5MB4XDTExMTEw ODAzNTIzOFoXDTE2MDgxNDA1NDMwOFowgZQxCzAJBgNVBAYTAkFVMQwwCgYDVQQIEwNBQ1QxFDAS BgNVBAcTC1RVR0dFUkFOT05HMRswGQ
YDVQQKExJQQ0VIUiBURVNUTG9jYXRpb24xGzAZBgNVBAsT ElBDRUhSIFRFU1RMb2NhdGlvbjEnMCUGA1UEAxMeUENFSFIgVEVTVExvY2F0aW9uIDo1NzEwMjA
4 ODkyMIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEA2Ytt71ZGTBZKKJ8mz/pw7FrovlY/ PUvPEpxV9H0lOidmrRpDrxVLMuPDt9xw+na7dG7u4xn
jj/SGI0CQbiR7pQhjr8G3hFcyuPcDy14Z vQe6a6qpseSOyZkiNyTH4yZ9yczG1mMIhE7ZOL8BLkIkcmNlFD2M9HoB0U0IV6mCrgI78RWPsSFv cZdpmNj/i6G
hWV8py2D93Vpv+/KajO1At029fAMWdJT/vioQkQJxznBWUnmT5+6HqpGigfBbhs69 q1VxK1AkFMXl5Q+NWnMdcAUZ7x0he5qtZXnn7MW4s/0yFw0SggXmz7UC
```

```
CxZQL6gYMWaiwaYz0Kw4 gJNzRxeeZQIDAQABo4ICFTCCAhEwDAYDVR0TAQH/BAIwADBPBggrBgEFBQcBAQRDMEEwPwYIKwYB BQUHMAGGM2h0dHA6Ly9vY3Nw
LmNlcnRpZmljYXRlcy1hdXN0cmFsaWEuY29tLmF1L21hb2NhLnBr eDCCASEGA1UdIASCARgwggEUMIIBEAYKKiTS/oB3AQYBAjCCAQAwgcsGCCsGAQUFBwICM
IG+GoG7 Q2VydGlmaWNhdGVzIGlzc3VlZCB1bmRlciB0aGlzIENQIG11c3Qgb25seSBiZSByZWxpZWQgb24g YnkgZW50aXRpZXMgd2l0aGluIHRoZSBDb21td
W5pdHkgb2YgSW50ZXJlc3QsIHVubGVzcyBvdGhl cndpc2UgYWdyZWVkLCBhbmQgbm90IGZvciBwdXJwb3NlcyBvdGhlciB0aGFuIHRob3NlIHBlcm1p dHRlZ
CBieSB0aGlzIENQLjAwBggrBgEFBQcCARYkaHR0cDovL3d3dy5tZWRpY2FyZWF1c3RyYWxp YS5nb3YuYXUvMBkGCSoko5CVFwHOGQQMFgo1NzEwMjA4ODkyMA
4GA1UdDwEB/wQEAwIHgDATBgNV HSMEDDAKgAhAd6hRCEOMszA4BgNVHR8EMTAvMC2gK6AphidodHRwOi8vbWEtdGVzdC1wa2kvTUFP Q0FDUkxzL2xhdGVzdC
5jcmwwEQYDVR0OBAoECELFSB2OHCWJMA0GCSqGSIb3DQEBBQUAA4IBAQAa +/PZFMnQVNrFgR1v5/WUsrqF7NKJVjQZ1gHtNnaDAeOUVeDY7yYQ0Gl6uHDzG3z
1PJJecyO3lN1G u64Q/1sZxZJPPvRrzRpmK3L9+Zay0WyJ17FL0SvZApd/FZ3+1eKK3j1cxhObYXTTU5XdvyQSUeAX zgb43uCUAOQZQ/P/uYC/wDOq4cqSBnu
X/iCxX/xd1ArOo0iLGBhdVmeGbfT+Xu511edkB2xxWU36 RX5qhwPtPpwPkbRQt/++K2hitGGqwCOKgx1ug4BKPXoN1y1eTvIbw4mn0CR9B+ApqxBsr+1LYSG0
 IwHfptS8p5wORCi6KQZRBeG+ZYIJ1OpufK1t
                        </X509Certificate>
                    </X509Data>
                </KeyInfo>
            </Signature>
        </ns:signature>
        <ns:timestamp xml:id="Id-1a59200a-3eea-4184-875e-0dda21322e63-2">
            <ns:created>2012-05-18T12:42:20.665+10:00</ns:created>
        </ns:timestamp>
    </soap:Header>
    <soap:Body xml:id="Id-1a59200a-3eea-4184-875e-0dda21322e63-3">
        <ns1:registerPCEHR>
            <!-- Optional: -->
            <ns1:assertions>
                <ns1:identityVerifiedByProvider>true</ns1:identityVerifiedByProvider>
                <ns1:versionOfTermsAndConditionsAgreed>1</ns1:versionOfTermsAndConditionsAgreed>
                <ns1:IVCCommunicationMethod>mail</ns1:IVCCommunicationMethod>
                <ns1:medicareConsent>true</ns1:medicareConsent>
                <!-- Optional: -->
                <ns1:parentDeclaration>true</ns1:parentDeclaration>
            </ns1:assertions>
        </ns1:registerPCEHR>
    </soap:Body>
</soap:Envelope>
```

Example

This request is for a parent registering a child.

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-
envelope" xmlns:ns="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns:xd="http://www.w3.org
/2000/09/xmldsig#" xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/interfaces/RegisterPCEHR/1.0">
```

```
<soap:Header xmlns:wsa="http://www.w3.org/2005/08/addressing">
    <wsa:Action>
        http://ns.electronichealth.net.au/pcehr/svc/RegisterPCEHR/1.0/RegisterPCEHRPortType/registerPCEHRRequest
    </wsa:Action>
    <wsa:MessageID>uuid:b162d8bf-2ee6-432e-a187-502ca15842d0</wsa:MessageID>
    <wsa:To>https://10.81.144.5/registerPCEHR</wsa:To>
    <ns:PCEHRHeader xml:id="Id-212a2ba8-c42c-46c3-8b2c-304d7b458e5c-1">
        <ns:User>
            <ns:IDType>HPII</ns:IDType>
            <ns:ID>3003601002356999</ns:ID>
            <!-- Optional: -->
            <ns:role>Individual</ns:role>
            <ns:userName>Medicare</ns:userName>
            <ns:useRoleForAudit>false</ns:useRoleForAudit>
        </ns:User>
        <!-- Optional: -->
        <ns:ihiNumber>8003603456799684</ns:ihiNumber>
        <ns:productType>
            <ns:vendor>Spy</ns:vendor>
            <ns:productName>Altova</ns:productName>
            <ns:productVersion>XML</ns:productVersion>
            <ns:platform>Windows</ns:platform>
        </ns:productType>
        <ns:clientSystemType>CIS</ns:clientSystemType>
        <!-- Optional: -->
        <ns:accessingOrganisation>
            <ns:organisationID>8003625833355996</ns:organisationID>
            <ns:organisationName>Fairview</ns:organisationName>
        </ns:accessingOrganisation>
    </ns:PCEHRHeader>
    <ns:signature>
        <Signature xmlns="http://www.w3.org/2000/09/xmldsig#">
            <SignedInfo>
                <CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#">
                    <InclusiveNamespaces xmlns="http://www.w3.org/2001/10/xml-exc-c14n#" PrefixList=""/>
                </CanonicalizationMethod>
                <SignatureMethod Algorithm="http://www.w3.org/2000/09/xmldsig#rsa-sha1"/>
                <Reference URI="#Id-212a2ba8-c42c-46c3-8b2c-304d7b458e5c-1" Type="">
                    <DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"/>
                    <DigestValue>Hu1IY85F+m/Sdtnn045XYK8lGAo=</DigestValue>
                </Reference>
                <Reference URI="#Id-212a2ba8-c42c-46c3-8b2c-304d7b458e5c-2" Type="">
```

```
                    <DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"/>
                    <DigestValue>e0LJ/OwUL/PkncpwsAQWbAKEli8=</DigestValue>
                </Reference>
                <Reference URI="#Id-212a2ba8-c42c-46c3-8b2c-304d7b458e5c-3" Type="">
                    <DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"/>
                    <DigestValue>b8v61u3HXMfH2Q1mIYJSB3hIzmI=</DigestValue>
                </Reference>
            </SignedInfo>
            <SignatureValue>
                qVGZi6UefhxwFitaRerxfu9G58SDLORkMIBl7ARI5VgrnUTVw13ARw5MJst7WVTCUDNne3SA+MsL ulyck1M+nBRTTPjq8Lm1+2hBx
8J8kIBp9o2J2/oQOKFiLHIAffBgzhvCNwJ/FzrNBQMHprimWAiU iJzV+ykwpVtOhkU9DkwHkfg1tAHS1bUqsYcywaGQoB+oaSoiDqZWF+XYIZbN0E+rVUjDrx
ujjeLZ f8X9BWdC+pTmNfJHqgAjNvczU4E3g1DS6aA1LrjI7eU2STnRFuPMT1JVzv9hciJn1vO1OamvFnpi URDmm/w0oWTxr9Z0KHBl3pITHL1Tjwf/id7llQ
==
            </SignatureValue>
            <KeyInfo>
                <X509Data>
                    <X509Certificate>
                        MIIFqDCCBJCgAwIBAgIDBKyXMA0GCSqGSIb3DQEBBQUAMH8xCzAJBgNVBAYTAkFVMQwwCgYDVQQK EwNHT1YxGzAZBgNVB
AsTEk1lZGljYXJlIEF1c3RyYWxpYTFFMEMGA1UEAxM8VGVzdCBNZWRpY2Fy ZSBBdXN0cmFsaWEgT3JnYW5pc2F0aW9uIENlcnRpZmljYXRpb24gQXV0aG9yaX
R5MB4XDTExMTEw ODAzNTIzOFoXDTE2MDgxNDA1NDMwOFowgZQxCzAJBgNVBAYTAkFVMQwwCgYDVQQIEwNBQ1QxFDAS BgNVBAcTC1RVR0dFUkFOT05HMRswGQ
YDVQQKExJQQ0VIUiBURVNUTG9jYXRpb24xGzAZBgNVBAsT ElBDRUhSIFRFU1RMb2NhdGlvbjEnMCUGA1UEAxMeUENFSFIgVEVTVExvY2F0aW9uIDo1NzEwMjA
4 ODkyMIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEA2Ytt71ZGTBZKKJ8mz/pw7FrovlY/ PUvPEpxV9H0lOidmrRpDrxVLMuPDt9xw+na7dG7u4xn
jj/SGI0CQbiR7pQhjr8G3hFcyuPcDy14Z vQe6a6qpseSOyZkiNyTH4yZ9yczG1mMIhE7ZOL8BLkIkcmNlFD2M9HoB0U0IV6mCrgI78RWPsSFv cZdpmNj/i6G
hWV8py2D93Vpv+/KajO1At029fAMWdJT/vioQkQJxznBWUnmT5+6HqpGigfBbhs69 q1VxK1AkFMXl5Q+NWnMdcAUZ7x0he5qtZXnn7MW4s/0yFw0SggXmz7UC
CxZQL6gYMWaiwaYz0Kw4 gJNzRxeeZQIDAQABo4ICFTCCAhEwDAYDVR0TAQH/BAIwADBPBggrBgEFBQcBAQRDMEEwPwYIKwYB BQUHMAGGM2h0dHA6Ly9vY3Nw
LmNlcnRpZmljYXRlcy1hdXN0cmFsaWEuY29tLmF1L21hb2NhLnBr eDCCASEGA1UdIASCARgwggEUMIIBEAYKKiTS/oB3AQYBAjCCAQAwgcsGCCsGAQUFBwICM
IG+GoG7 Q2VydGlmaWNhdGVzIGlzc3VlZCB1bmRlciB0aGlzIENQIG11c3Qgb25seSBiZSByZWxpZWQgb24g YnkgZW50aXRpZXMgd2l0aGluIHRoZSBDb21td
W5pdHkgb2YgSW50ZXJlc3QsIHVubGVzcyBvdGhl cndpc2UgYWdyZWVkLCBhbmQgbm90IGZvciBwdXJwb3NlcyBvdGhlciB0aGFuIHRob3NlIHBlcm1p dHRlZ
CBieSB0aGlzIENQLjAwBggrBgEFBQcCARYkaHR0cDovL3d3dy5tZWRpY2FyZWF1c3RyYWxp YS5nb3YuYXUvMBkGCSoko5CVFwHOGQQMFgo1NzEwMjA4ODkyMA
4GA1UdDwEB/wQEAwIHgDATBgNV HSMEDDAKgAhAd6hRCEOMszA4BgNVHR8EMTAvMC2gK6AphidodHRwOi8vbWEtdGVzdC1wa2kvTUFP Q0FDUkxzL2xhdGVzdC
5jcmwwEQYDVR0OBAoECELFSB2OHCWJMA0GCSqGSIb3DQEBBQUAA4IBAQAa +/PZFMnQVNrFgR1v5/WUsrqF7NKJVjQZ1gHtNnaDAeOUVeDY7yYQ0Gl6uHDzG3z
1PJJecyO3lN1G u64Q/1sZxZJPPvRrzRpmK3L9+Zay0WyJ17FL0SvZApd/FZ3+1eKK3j1cxhObYXTTU5XdvyQSUeAX zgb43uCUAOQZQ/P/uYC/wDOq4cqSBnu
X/iCxX/xd1ArOo0iLGBhdVmeGbfT+Xu511edkB2xxWU36 RX5qhwPtPpwPkbRQt/++K2hitGGqwCOKgx1ug4BKPXoN1y1eTvIbw4mn0CR9B+ApqxBsr+1LYSG0
 IwHfptS8p5wORCi6KQZRBeG+ZYIJ1OpufK1t
                    </X509Certificate>
                </X509Data>
            </KeyInfo>
        </Signature>
    </ns:signature>
    <ns:timestamp xml:id="Id-212a2ba8-c42c-46c3-8b2c-304d7b458e5c-2">
        <ns:created>2012-05-18T12:42:46.227+10:00</ns:created>
    </ns:timestamp>
```

```
    </soap:Header>
    <soap:Body xml:id="Id-212a2ba8-c42c-46c3-8b2c-304d7b458e5c-3">
        <ns1:registerPCEHR>
            <!-- Optional: -->
            <ns1:child>
                <ns:ihiNumber>8003604567901417</ns:ihiNumber>
            </ns1:child>
            <ns1:assertions>
                <ns1:identityVerifiedByProvider>true</ns1:identityVerifiedByProvider>
                <ns1:versionOfTermsAndConditionsAgreed>800</ns1:versionOfTermsAndConditionsAgreed>
                <ns1:IVCCommunicationMethod>mail</ns1:IVCCommunicationMethod>
                <ns1:medicareConsent>true</ns1:medicareConsent>
                <!-- Optional: -->
                <ns1:parentDeclaration>true</ns1:parentDeclaration>
            </ns1:assertions>
        </ns1:registerPCEHR>
    </soap:Body>
</soap:Envelope>
```

Coding Tips:

The published schema PCEHR_RegisterPCEHR.xds defines the `child` element using a `choice` wrapper; `choice` is not currently supported with .NET clients.

The recommended work around is to add the following lines of code:

```
   inValue.registerPCEHR.child = new registerPCEHRChild();
            var a = new registerPCEHRChildDemographics { dateOfBirth = DateTime.Now.Date, dvaFileNumber = "123123" };
       inValue.registerPCEHR.child.Item = a;
```

This method will then allow the handling of the following message sample:

```
<child>
    <demographics>
        <sex xmlns="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">M</sex>
        <dateOfBirth xmlns="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">2012-06-05</dateOfB
irth>
        <dvaFileNumber xmlns="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">123123</dvaFileNu
mber>
    </demographics>
</child>
```

And the following method will handle the child's IHI number:

```
inValue.registerPCEHR.child = new registerPCEHRChild();
 inValue.registerPCEHR.child.Item = IHIChild;
```

This would allow the handling of the following message sample code:

```
<child>
    <ihiNumber xmlns="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">8003601243017717</ihiNumb
er>
</child>
```

10.2.2 Response

Name of Response: registerPCEHRResponse

Outputs:

See section 4.2 of *PCEHR Registration Service, Technical Service Specification* for the current list of the elements in the outputs, their data types, cardinality and the conformances.

Table 45: registerPCEHRResponse elements

Level 1 Element	Level 2 Element	Level 3 Element	Card	Explanation
registerPCEHRResponse			1..1	
	ResponseStatus		1..1	
		code	1..1	Status Code for the result of the transaction
		description	1..1	Brief status description
		details	0..1	Additional detail of the response

Web Service Errors: see Appendix E.

Table 46: registerPCEHRResponse functional errors

Code	Description
PCEHR_SUCCESS	SUCCESS
PCEHR_ERROR_9001	Identity has not been verified by provider
PCEHR_ERROR_9002	Invalid terms and conditions version
PCEHR_ERROR_9003	The latest terms and conditions have not been accepted
PCEHR_ERROR_9004	IVC communication method has not been specified
PCEHR_ERROR_9005	Invalid IVC communication method
PCEHR_ERROR_9006	Medicare consent has not been specified
PCEHR_ERROR_9007	Parent declaration is required for parent-child registration
PCEHR_ERROR_9008	Individual PCEHR already exists
PCEHR_ERROR_9009	Child PCEHR already exists
PCEHR_ERROR_9010	Individual cannot be less than 14 years of age
PCEHR_ERROR_9011	Parent and child must be on the same Medicare card
PCEHR_ERROR_9012	Child cannot be older than 18 years of age
PCEHR_ERROR_9013	There must be a 14-year age gap between parent and child
PCEHR_ERROR_9014	Registration successful - IVC correspondence will be delayed. Please contact System Administrator if required urgently
PCEHR_ERROR_5006	No unique active IHI found
PCEHR_ERROR_0101	Invalid family name
PCEHR_ERROR_0102	Invalid given name

Code	Description
PCEHR_ERROR_0103	The birth year must not be less than 1800
PCEHR_ERROR_0104	The date of birth must not be in the future
PCEHR_ERROR_0105	Invalid mobile phone number
PCEHR_ERROR_0106	Invalid email address
PCEHR_ERROR_0107	Invalid Medicare card number
PCEHR_ERROR_0108	Invalid Medicare IRN
PCEHR_ERROR_0109	Invalid DVA file number
PCEHR_ERROR_0110	Invalid military health number
PCEHR_ERROR_0111	Invalid postcode
PCEHR_ERROR_0112	Invalid suburb
PCEHR_ERROR_0113	Invalid combinations of state, postcode and suburb
PCEHR_ERROR_0114	Postal Delivery Number is mandatory when Postal Delivery Type Code is entered, unless Postal Delivery Type Code is Care PO, CMA or CMB
PCEHR_ERROR_0115	If Unit Type is present, Unit Number must be keyed
PCEHR_ERROR_0116	If Level Type is present, Level Number must be keyed
PCEHR_ERROR_0117	Invalid unit number
PCEHR_ERROR_0118	Invalid address site name
PCEHR_ERROR_0119	Invalid level number
PCEHR_ERROR_0120	Invalid street number
PCEHR_ERROR_0121	Invalid lot number
PCEHR_ERROR_0122	Invalid street name
PCEHR_ERROR_0123	Invalid postal delivery number

Code	Description
PCEHR_ERROR_0124	Either street number or lot number required for an Australian address
PCEHR_ERROR_0125	Only one of lot number or street number required for an Australian address
PCEHR_ERROR_0126	If the country is Australia, you cannot enter InternationalAddressLine, InternationalStateProvince, InternationalPostcode
PCEHR_ERROR_0127	Invalid IHI status
PCEHR_ERROR_0128	Invalid IHI verification status
PCEHR_ERROR_0129	Invalid IHI record status
PCEHR_ERROR_0130	Invalid date effective
PCEHR_ERROR_0131	Invalid ID type
PCEHR_ERROR_0132	Invalid ID number
PCEHR_ERROR_0133	Invalid state
PCEHR_ERROR_0134	Invalid sex
PCEHR_ERROR_0135	Invalid date of birth

Example

This is the response for registering an individual.

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-
envelope" xmlns:ns="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns:xd="http://www.w3.org
/2000/09/xmldsig#" xmlns:ns1="http://ns.electronichealth.net.au/pcehr/xsd/interfaces/RegisterPCEHR/1.0">
    <soap:Header>
        <wsa:Action xmlns:wsa="http://www.w3.org/2005/08/addressing">
            http://ns.electronichealth.net.au/pcehr/svc/RegisterPCEHR/1.0/RegisterPCEHRPortType/Fault/standardError
        </wsa:Action>
        <wsa:MessageID xmlns:wsa="http://www.w3.org/2005/08/addressing">
            uuid:Id-0001337306478736-81dce6cb4fb5ad6e2cd90000-1
        </wsa:MessageID>
        <wsa:RelatesTo xmlns:wsa="http://www.w3.org/2005/08/addressing">uuid:b162d8bf-2ee6-432e-a187-
502ca15842d0</wsa:RelatesTo>
        <ns:signature xmlns:ns="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">
            <dsig:Signature xmlns:dsig="http://www.w3.org/2000/09/xmldsig#" Id="Id-0001337306720174-
43c891f24fb5ae600b990000-3">
                <dsig:SignedInfo>
                    <dsig:CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#"/>
                    <dsig:SignatureMethod Algorithm="http://www.w3.org/2000/09/xmldsig#rsa-sha1"/>
                    <dsig:Reference URI="#Id-0001337306720174-43c891f24fb5ae600b990000-2">
                        <dsig:DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"/>
                        <dsig:DigestValue>/TedPAS1FY4pQlCboJ4idvPKU68=</dsig:DigestValue>
                    </dsig:Reference>
                </dsig:SignedInfo>
                <dsig:SignatureValue>
                    Lvk9iFguHzf9wyYqe1VBWvDsw2WXHkBVTVrBi61htMcNJ91w+SAYmEdJSLd3MWO+ cLbxlVdzSfYs83Ry1V9jLXL8aIE3KpO0pzbCM
ZrYK1yd8HfUv4/EKJ4C7WCOQDVl 1IObUt218o7HdKWFyWApWrRcfjKFNwUf0F4nmXt7WzgtMJ9WbFJ/JpMNcEouCnzD EQvh+Cf2TvS8jovLRpj29k8cIzFGG
jxhBZEKnEcacb/JwqErKhZbb9htPdpuqwjZ iXubH8kHUdkiFZp57YPRIbV299TgeQGo05CMePdgThXeVFwhhErDYvcI88qercKQ BUUOJOctzFu3eoTuISyUE
w==
                </dsig:SignatureValue>
                <dsig:KeyInfo Id="Id-0001337306720174-43c891f24fb5ae600b990000-4">
                    <dsig:X509Data>
                        <dsig:X509Certificate>
                            MIIFqDCCBJCgAwIBAgIDBKyXMA0GCSqGSIb3DQEBBQUAMH8xCzAJBgNVBAYTAkFVMQwwCgYDVQQKEwNHT1YxGzAZBgNVBA
sTEk1lZGljYXJlIEF1c3RyYWxpYTFFMEMGA1UEAxM8VGVzdCBNZWRpY2FyZSBBdXN0cmFsaWEgT3JnYW5pc2F0aW9uIENlcnRpZmljYXRpb24gQXV0aG9yaXR5
MB4XDTExMTEwODAzNTIzOFoXDTE2MDgxNDA1NDMwOFowgZQxCzAJBgNVBAYTAkFVMQwwCgYDVQQIEwNBQ1QxFDASBgNVBAcTC1RVR0dFUkFOT05HMRswGQYDVQ
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MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEA2Ytt71ZGTBZKKJ8mz/pw7FrovlY/PUvPEpxV9H0lOidmrRpDrxVLMuPDt9xw+na7dG7u4xnjj/SGI0
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```

```
3Vpv+/KajO1At029fAMWdJT/vioQkQJxznBWUnmT5+6HqpGigfBbhs69q1VxK1AkFMXl5Q+NWnMdcAUZ7x0he5qtZXnn7MW4s/0yFw0SggXmz7UCCxZQL6gYMW
aiwaYz0Kw4gJNzRxeeZQIDAQABo4ICFTCCAhEwDAYDVR0TAQH/BAIwADBPBggrBgEFBQcBAQRDMEEwPwYIKwYBBQUHMAGGM2h0dHA6Ly9vY3NwLmNlcnRpZmlj
YXRlcy1hdXN0cmFsaWEuY29tLmF1L21hb2NhLnBreDCCASEGA1UdIASCARgwggEUMIIBEAYKKiTS/oB3AQYBAjCCAQAwgcsGCCsGAQUFBwICMIG+GoG7Q2VydG
lmaWNhdGVzIGlzc3VlZCB1bmRlciB0aGlzIENQIG11c3Qgb25seSBiZSByZWxpZWQgb24gYnkgZW50aXRpZXMgd2l0aGluIHRoZSBDb21tdW5pdHkgb2YgSW50
ZXJlc3QsIHVubGVzcyBvdGhlcndpc2UgYWdyZWVkLCBhbmQgbm90IGZvciBwdXJwb3NlcyBvdGhlciB0aGFuIHRob3NlIHBlcm1pdHRlZCBieSB0aGlzIENQLj
AwBggrBgEFBQcCARYkaHR0cDovL3d3dy5tZWRpY2FyZWF1c3RyYWxpYS5nb3YuYXUvMBkGCSoko5CVFwHOGQQMFgo1NzEwMjA4ODkyMA4GA1UdDwEB/wQEAwIH
gDATBgNVHSMEDDAKgAhAd6hRCEOMszA4BgNVHR8EMTAvMC2gK6AphidodHRwOi8vbWEtdGVzdC1wa2kvTUFPQ0FDUkxzL2xhdGVzdC5jcmwwEQYDVR0OBAoECE
LFSB2OHCWJMA0GCSqGSIb3DQEBBQUAA4IBAQAa+/PZFMnQVNrFgR1v5/WUsrqF7NKJVjQZ1gHtNnaDAeOUVeDY7yYQ0Gl6uHDzG3z1PJJecyO3lN1Gu64Q/1sZ
xZJPPvRrzRpmK3L9+Zay0WyJ17FL0SvZApd/FZ3+1eKK3j1cxhObYXTTU5XdvyQSUeAXzgb43uCUAOQZQ/P/uYC/wDOq4cqSBnuX/iCxX/xd1ArOo0iLGBhdVm
eGbfT+Xu511edkB2xxWU36RX5qhwPtPpwPkbRQt/++K2hitGGqwCOKgx1ug4BKPXoN1y1eTvIbw4mn0CR9B+ApqxBsr+1LYSG0IwHfptS8p5wORCi6KQZRBeG+
ZYIJ1OpufK1t
```


```
                        </dsig:X509Certificate>
                    </dsig:X509Data>
                </dsig:KeyInfo>
            </dsig:Signature>
        </ns:signature>
    </soap:Header>
    <soap:Body xml:id="Id-d8f2d8e6-539d-47be-bac3-6d1c74284619-1">
        <ns1:registerPCEHRResponse>
            <ns1:responseStatus>
                <ns:code>PCEHR_SUCCESS</ns:code>
                <ns:description>SUCCESS</ns:description>
            </ns1:responseStatus>
        </ns1:registerPCEHRResponse>
    </soap:Body>
</soap:Envelope>
```

Example

This is the response for registering a child.

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-
envelope" xmlns:ns="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns:ns1="http://ns.electr
onichealth.net.au/pcehr/xsd/interfaces/RegisterPCEHR/1.0">
    <soap:Header>
        <wsa:Action xmlns:wsa="http://www.w3.org/2005/08/addressing">
            http://ns.electronichealth.net.au/pcehr/svc/RegisterPCEHR/1.0/RegisterPCEHRPortType/Fault/standardError
        </wsa:Action>
        <wsa:MessageID xmlns:wsa="http://www.w3.org/2005/08/addressing">
            uuid:Id-0001337306478736-81dce6cb4fb5ad6e2cd90000-1
        </wsa:MessageID>
```

```
        <wsa:RelatesTo xmlns:wsa="http://www.w3.org/2005/08/addressing">uuid:b162d8bf-2ee6-432e-a187-
502ca15842d0</wsa:RelatesTo>
        <ns:signature xmlns:ns="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">
            <dsig:Signature xmlns:dsig="http://www.w3.org/2000/09/xmldsig#" Id="Id-0001337306720174-
43c891f24fb5ae600b990000-3">
                <dsig:SignedInfo>
                    <dsig:CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#"/>
                    <dsig:SignatureMethod Algorithm="http://www.w3.org/2000/09/xmldsig#rsa-sha1"/>
                    <dsig:Reference URI="#Id-0001337306720174-43c891f24fb5ae600b990000-2">
                        <dsig:DigestMethod Algorithm="http://www.w3.org/2000/09/xmldsig#sha1"/>
                        <dsig:DigestValue>/TedPAS1FY4pQlCboJ4idvPKU68=</dsig:DigestValue>
                    </dsig:Reference>
                </dsig:SignedInfo>
                <dsig:SignatureValue>
                    Lvk9iFguHzf9wyYqe1VBWvDsw2WXHkBVTVrBi61htMcNJ91w+SAYmEdJSLd3MWO+ cLbxlVdzSfYs83Ry1V9jLXL8aIE3KpO0pzbCM
ZrYK1yd8HfUv4/EKJ4C7WCOQDVl 1IObUt218o7HdKWFyWApWrRcfjKFNwUf0F4nmXt7WzgtMJ9WbFJ/JpMNcEouCnzD EQvh+Cf2TvS8jovLRpj29k8cIzFGG
jxhBZEKnEcacb/JwqErKhZbb9htPdpuqwjZ iXubH8kHUdkiFZp57YPRIbV299TgeQGo05CMePdgThXeVFwhhErDYvcI88qercKQ BUUOJOctzFu3eoTuISyUE
w==
                </dsig:SignatureValue>
                <dsig:KeyInfo Id="Id-0001337306720174-43c891f24fb5ae600b990000-4">
                    <dsig:X509Data>
                        <dsig:X509Certificate>
                            MIIFqDCCBJCgAwIBAgIDBKyXMA0GCSqGSIb3DQEBBQUAMH8xCzAJBgNVBAYTAkFVMQwwCgYDVQQKEwNHT1YxGzAZBgNVBA
sTEk1lZGljYXJlIEF1c3RyYWxpYTFFMEMGA1UEAxM8VGVzdCBNZWRpY2FyZSBBdXN0cmFsaWEgT3JnYW5pc2F0aW9uIENlcnRpZmljYXRpb24gQXV0aG9yaXR5
MB4XDTExMTEwODAzNTIzOFoXDTE2MDgxNDA1NDMwOFowgZQxCzAJBgNVBAYTAkFVMQwwCgYDVQQIEwNBQ1QxFDASBgNVBAcTC1RVR0dFUkFOT05HMRswGQYDVQ
QKExJQQ0VIUiBURVNUTG9jYXRpb24xGzAZBgNVBAsTElBDRUhSIFRFU1RMb2NhdGlvbjEnMCUGA1UEAxMeUENFSFIgVEVTVExvY2F0aW9uIDo1NzEwMjA4ODky
MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEA2Ytt71ZGTBZKKJ8mz/pw7FrovlY/PUvPEpxV9H0lOidmrRpDrxVLMuPDt9xw+na7dG7u4xnjj/SGI0
CQbiR7pQhjr8G3hFcyuPcDy14ZvQe6a6qpseSOyZkiNyTH4yZ9yczG1mMIhE7ZOL8BLkIkcmNlFD2M9HoB0U0IV6mCrgI78RWPsSFvcZdpmNj/i6GhWV8py2D9
3Vpv+/KajO1At029fAMWdJT/vioQkQJxznBWUnmT5+6HqpGigfBbhs69q1VxK1AkFMXl5Q+NWnMdcAUZ7x0he5qtZXnn7MW4s/0yFw0SggXmz7UCCxZQL6gYMW
aiwaYz0Kw4gJNzRxeeZQIDAQABo4ICFTCCAhEwDAYDVR0TAQH/BAIwADBPBggrBgEFBQcBAQRDMEEwPwYIKwYBBQUHMAGGM2h0dHA6Ly9vY3NwLmNlcnRpZmlj
YXRlcy1hdXN0cmFsaWEuY29tLmF1L21hb2NhLnBreDCCASEGA1UdIASCARgwggEUMIIBEAYKKiTS/oB3AQYBAjCCAQAwgcsGCCsGAQUFBwICMIG+GoG7Q2VydG
lmaWNhdGVzIGlzc3VlZCB1bmRlciB0aGlzIENQIG11c3Qgb25seSBiZSByZWxpZWQgb24gYnkgZW50aXRpZXMgd2l0aGluIHRoZSBDb21tdW5pdHkgb2YgSW50
ZXJlc3QsIHVubGVzcyBvdGhlcndpc2UgYWdyZWVkLCBhbmQgbm90IGZvciBwdXJwb3NlcyBvdGhlciB0aGFuIHRob3NlIHBlcm1pdHRlZCBieSB0aGlzIENQLj
AwBggrBgEFBQcCARYkaHR0cDovL3d3dy5tZWRpY2FyZWF1c3RyYWxpYS5nb3YuYXUvMBkGCSoko5CVFwHOGQQMFgo1NzEwMjA4ODkyMA4GA1UdDwEB/wQEAwIH
gDATBgNVHSMEDDAKgAhAd6hRCEOMszA4BgNVHR8EMTAvMC2gK6AphidodHRwOi8vbWEtdGVzdC1wa2kvTUFPQ0FDUkxzL2xhdGVzdC5jcmwwEQYDVR0OBAoECE
LFSB2OHCWJMA0GCSqGSIb3DQEBBQUAA4IBAQAa+/PZFMnQVNrFgR1v5/WUsrqF7NKJVjQZ1gHtNnaDAeOUVeDY7yYQ0Gl6uHDzG3z1PJJecyO3lN1Gu64Q/1sZ
xZJPPvRrzRpmK3L9+Zay0WyJ17FL0SvZApd/FZ3+1eKK3j1cxhObYXTTU5XdvyQSUeAXzgb43uCUAOQZQ/P/uYC/wDOq4cqSBnuX/iCxX/xd1ArOo0iLGBhdVm
eGbfT+Xu511edkB2xxWU36RX5qhwPtPpwPkbRQt/++K2hitGGqwCOKgx1ug4BKPXoN1y1eTvIbw4mn0CR9B+ApqxBsr+1LYSG0IwHfptS8p5wORCi6KQZRBeG+
ZYIJ1OpufK1t
                        </dsig:X509Certificate>
                    </dsig:X509Data>
                </dsig:KeyInfo>
```

```
            </dsig:Signature>
        </ns:signature>
    </soap:Header>
    <soap:Body>
        <ns1:registerPCEHRResponse>
            <ns1:responseStatus>
                <ns:code>PCEHR_SUCCESS</ns:code>
                <ns:description>SUCCESS</ns:description>
            </ns1:responseStatus>
        </ns1:registerPCEHRResponse>
    </soap:Body>
</soap:Envelope>
```

Appendix A Class & Type Codes

Table 47: Class and type codes

Coding System	Class Code	OID	ClassCode DisplayName	TypeCodeDisplay Name
LOINC	60591-5	1.2.36.1.2001.1006.1.16565.1	Patient Summary	Shared Health Summary
LOINC	57133-1	1.2.36.1.2001.1006.1.21000.4	Referral note	e-Referral (1A)
LOINC	57133-1	1.2.36.1.2001.1006.1.21000.1	Referral note	e-Referral (1B)
LOINC	57133-1	1.2.36.1.2001.1006.1.21000.2	Referral note	e-Referral (2)
LOINC	57133-1	1.2.36.1.2001.1006.1.21000.3	Referral note	e-Referral (3A)
LOINC	51852-2	1.2.36.1.2001.1006.1.16615.4	Letter	Specialist Letter (1A)
LOINC	51852-2	1.2.36.1.2001.1006.1.16615.1	Letter	Specialist Letter (1B)
LOINC	51852-2	1.2.36.1.2001.1006.1.16615.2	Letter	Specialist Letter (2)
LOINC	51852-2	1.2.36.1.2001.1006.1.16615.3	Letter	Specialist Letter (3A)
LOINC	18842-5	1.2.36.1.2001.1006.1.20000.4	Discharge Summarisation Note	Discharge Summary (1A)
LOINC	18842-5	1.2.36.1.2001.1006.1.20000.1	Discharge Summarisation Note	Discharge Summary (1B)
LOINC	18842-5	1.2.36.1.2001.1006.1.20000.2	Discharge Summarisation Note	Discharge Summary (2)
LOINC	18842-5	1.2.36.1.2001.1006.1.20000.3	Discharge Summarisation Note	Discharge Summary (3A)
LOINC	34133-9	1.2.36.1.2001.1006.1.16473.3	Summarisation of episode note	Event Summary (1B)
LOINC	34133-9	1.2.36.1.2001.1006.1.16473.2	Summarisation of episode	Event Summary (2)

Coding System	Class Code	OID	ClassCode DisplayName	TypeCodeDisplay Name
			note	
LOINC	34133-9	1.2.36.1.2001.1006.1.16473.1	Summarisation of episode note	Event Summary (3)
NCTIS	100.16100	1.2.36.1.2001.1006.1.16100.4	e-Prescription	e-Prescription (1A)
NCTIS	100.16100	1.2.36.1.2001.1006.1.16100.1	e-Prescription	e-Prescription (1B)
NCTIS	100.16100	1.2.36.1.2001.1006.1.16100.2	e-Prescription	e-Prescription (2)
NCTIS	100.16100	1.2.36.1.2001.1006.1.16100.3	e-Prescription	e-Prescription (3A)
NCTIS	100.16112	1.2.36.1.2001.1006.1.16112.4	Dispense Record	Dispense Record (1A)
NCTIS	100.16112	1.2.36.1.2001.1006.1.16112.1	Dispense Record	Dispense Record (1B)
NCTIS	100.16112	1.2.36.1.2001.1006.1.16112.2	Dispense Record	Dispense Record (2)
NCTIS	100.16112	1.2.36.1.2001.1006.1.16112.3	Dispense Record	Dispense Record (3A)
NCTIS	100.16650	1.2.36.1.2001.1006.1.16650.1	Pharmaceutical Benefits Report	Pharmaceutical Benefits Report
NCTIS	100.16671	1.2.36.1.2001.1006.1.16671.1	Australian Organ Donor Register	Australian Organ Donor Register
NCTIS	100.16659	1.2.36.1.2001.1006.1.16659.1	Australian Childhood Immunisation Register	Australian Childhood Immunisation Register
NCTIS	100.16644	1.2.36.1.2001.1006.1.16644.1	Medicare/DVA Benefits Report	Medicare/DVA Benefits Report
NCTIS	100.16681	1.2.36.1.2001.1006.1.16681.1	Consumer Entered Notes	Consumer Entered Notes (3A)
NCTIS	100.16685	1.2.36.1.2001.1006.1.16685.1	Consumer Entered Health Summary	Consumer Entered Health Summary (3A)

Coding System	Class Code	OID	ClassCode DisplayName	TypeCodeDisplay Name
NCTIS	100.16696	1.2.36.1.2001.1006.1.16696.1	Advance Care Directive Custodian Record	Advance Care Directive Custodian Record

Appendix B Stored Query IDs

Query Name	Query ID
FindDocuments	urn:uuid:14d4debf-8f97-4251-9a74-a90016b0af0d
FindSubmissionSets	urn:uuid:f26abbcb-ac74-4422-8a30-edb644bbc1a9
FindFolders	urn:uuid:958f3006-baad-4929-a4deff1114824431
GetAll	urn:uuid:10b545ea-725c-446d-9b95-8aeb444eddf3
GetDocuments	urn:uuid:5c4f972b-d56b-40ac-a5fcc8ca9b40b9d4
GetFolders	urn:uuid:5737b14c-8a1a-4539-b659-e03a34a5e1e4
GetAssociations	urn:uuid:a7ae438b-4bc2-4642-93e9-be891f7bb155
GetDocumentsAndAssociations	urn:uuid:bab9529a-4a10-40b3-a01ff68a615d247a
GetSubmissionSets	urn:uuid:51224314-5390-4169-9b91-b1980040715a
GetSubmissionSetAndContents	urn:uuid:e8e3cb2c-e39c-46b9-99e4-c12f57260b83
GetFolderAndContents	urn:uuid:b909a503-523d-4517-8acf-8e5834dfc4c7
GetFoldersForDocument	urn:uuid:10cae35a-c7f9-4cf5-b61efc3278ffb578
GetRelatedDocuments	urn:uuid:d90e5407-b356-4d91-a89f-873917b4b0e6

Appendix C Object IDs

Table 48: Object IDs

Public Constant String	ID
RegistryObject	
XDS_REGISTRY_PACKAGE	urn:oasis:names:tc:ebxml regrep:ObjectType:RegistryObject:RegistryPackage
XDS_CLASSIFICATION	urn:oasis:names:tc:ebxml regrep:ObjectType:RegistryObject:Classification
XDS_EXTERNAL_IDENTIFIER	urn:oasis:names:tc:ebxml regrep:ObjectType:RegistryObject:ExternalIdentifier
XDS_ASSOCIATION	urn:oasis:names:tc:ebxml regrep:ObjectType:RegistryObject:Association
XDSSubmissionSet	
XDS_SUBMISSION_SET	urn:uuid:a54d6aa5 d40d 43f9 88c5 b4633d873bdd ClassificationNode R/R
XDS_SUBMISSION_SET_AUTHOR	urn:uuid:a7058bb9 b4e4 4307 ba5b e3f0ab85e12d External Classification Scheme R2/R
XDS_SUBMISSION_SET_CONTENT_TYPE_CODE	urn:uuid:aa543740 bdda 424e 8c96 df4873be8500 External Classification Scheme R/R
XDS_SUBMISSION_SET_UNIQUE_ID	urn:uuid:96fdda7c d067 4183 912e bf5ee74998a8 External Identifer R/R
XDS_SUBMISSION_SET_SOURCE_ID	urn:uuid:554ac39e e3fe 47fe b233 965d2a147832 External Identifier R/R
XDS_SUBMISSION_SET_PATIENT_ID	urn:uuid:6b5aea1a 874d 4603 a4bc 96a0a7b38446 External Identifier R/R

Public Constant String	ID
XDSDocumentEntry	
XDS_DOCUMENT_ENTRY	urn:uuid:7edca82f 054d 47f2 a032 9b2a5b5186c1 ClassificationNode R/R
XDS_DOCUMENT_ENTRY_AUTHOR	urn:uuid:93606bcf 9494 43ec 9b4e a7748d1a838d External Classification Scheme R2/R
XDS_DOCUMENT_ENTRY_CLASS_CODE	urn:uuid:41a5887f 8865 4c09 adf7 e362475b143a External Classification Scheme R/R
XDS_DOCUMENT_ENTRY_CONFIDENTIALITY_CODE	urn:uuid:f4f85eac e6cb 4883 b524 f2705394840f External Classification Scheme R/P
XDS_DOCUMENT_ENTRY_EVENT_CODE_LIST	urn:uuid:2c6b8cb7 8b2a 4051 b291 b1ae6a575ef4 External Classification Scheme O/R
XDS_DOCUMENT_ENTRY_FORMAT_CODE	urn:uuid:a09d5840 386c 46f2 b5ad 9c3699a4309d External Classification Scheme R/R
XDS_DOCUMENT_ENTRY_HEALTHCARE_FACILITY_TYPE_CODE	urn:uuid:f33fb8ac 18af 42cc ae0e ed0b0bdb91e1 External Classification Scheme R/R
XDS_DOCUMENT_ENTRY_PATIENT_ID	urn:uuid:58a6f841 87b3 4a3e 92fd a8ffeff98427 ExternalIdentifier R/R
XDS_DOCUMENT_ENTRY_PRACTICE_SETTING_CODE	urn:uuid:cccf5598 8b07 4b77 a05e ae952c785ead External Classification Scheme R/R
XDS_DOCUMENT_ENTRY_TYPE_CODE	urn:uuid:f0306f51 975f 434e a61c c59651d33983 External Classification Scheme R/R
XDS_DOCUMENT_ENTRY_UNIQUE_ID	urn:uuid:2e82c1f6 a085 4c72 9da3 8640a32e42ab ExternalIdentifier R/R

Public Constant String	ID
Association Type	
XDS_ASSOCIATION_TYPE_HAS_MEMBER	urn:oasis:names:tc:ebxml regrep:AssociationType:HasMember
XDS_ASSOCIATION_TYPE_APND	urn:ihe:iti:2007:AssociationType:APND
XDS_ASSOCIATION_TYPE_RPLC	urn:ihe:iti:2007:AssociationType:RPLC
XDS_ASSOCIATION_TYPE_XFRM	urn:ihe:iti:2007:AssociationType:XFRM
XDS_ASSOCIATION_TYPE_XFRM_RPLC	urn:ihe:iti:2007:AssociationType:XFRM_RPLC
XDS_ASSOCIATION_TYPE_SIGNS	urn:ihe:iti:2007:AssociationType:signs
XDS_ASSOCIATION_TYPE_UPDATE_AVAILABILITY_STATUS	urn:ihe:iti:2010:AssociationType:UpdateAvailabilityStatus
XDS_ASSOCIATION_TYPE_HAS_MEMBER	urn:oasis:names:tc:ebxml regrep:AssociationType:HasMember

Appendix D XDS Value Sets

D.1 XDSDocumentEntry

The XDSDocumentEntry values can be mainly populated from details within the CDA document. The few other fields would generally be fixed by the vendor during development, or at least configurable to set them at installation time.

Table 49: XDS Document Entry Set

Field	Description	Xpath in CDA document
author:authorInstitution	Author Org HPIO	/cda:ClinicalDocument/cda:author/cda:assignedAuthor/cda:assignedPerson/ext:asEmployment/ext:employerOrganization/cda:asOrganizationPartOf/cda:wholeOrganization/ext:asEntityIdentifier[@classCode='IDENT']/ext:id[@assigningAuthorityName='HPI O']/@root
author:authorPerson	Author HPII	/cda:ClinicalDocument/cda:author/cda:assignedAuthor/cda:assignedPerson/ext:asEntityIdentifier[@classCode='IDENT']/ext:id[@assigningAuthorityName='HPI I']/@root
	Author Family Name	/cda:ClinicalDocument/cda:author/cda:assignedAuthor/cda:assignedPerson/cda:name/family
	Author Given Name	/cda:ClinicalDocument/cda:author/cda:assignedAuthor/cda:assignedPerson/cda:name/given[1]
	Author Prefix	/cda:ClinicalDocument/cda:author/cda:assignedAuthor/cda:assignedPerson/cda:name/prefix
classCode	Document Type	/cda:ClinicalDocument/cda:code/@code
classCodeDisplayName	(See Appendix A)	/cda:ClinicalDocument/cda:code/@displayName
confidentialityCode	Fixed: “NA”	/cda:ClinicalDocument/cda:confidentialityCode/@nullFlavor
creationTime	Document Creation Time (without the timezone element)	/cda:ClinicalDocument/cda:effectiveTime/@value

Field	Description	Xpath in CDA document
entryUUID	Fixed: "DOCUMENT_SYMBOLICID_01"	PCEHR System Generates this UUID when it receives the request
formatCode	Supplied by Template Service to come	
formatCodeDisplayName	Supplied by Template Service to come	
hash	Only for ITI 42	
healthcareFacilityTypeCode	See CDA packaging spec	
healthcareFacilityTypeCodeDisplayName	See CDA packaging spec	
languageCode	(See Table 2 of the DE TSS) Recommended value=" en-AU"	/cda:ClinicalDocument/cda:languageCode/@code
mimeType	attachment type	application/zip
patientId	IHI Number	/cda:ClinicalDocument/cda:recordTarget/cda:patientRole/cda:patient/ext:asEntityIdentifier[@classCode='IDENT']/ext:id[@assigningAuthorityName='IHI']/@root
practiceSettingCode	See CDA packaging spec.	
practiceSettingCodeDisplayName	See CDA packaging spec.	
repositoryUniqueId		PCEHR System will set this value
serviceStartTime	In UTC format. In Discharge Summaries the convention is now that this represents the admittance date of the individual	/cda:ClinicalDocument/cda:effectiveTime/@value
serviceStopTime	See CDA packaging spec. In UTC format.	/cda:ClinicalDocument/cda:effectiveTime/@value

Field	Description	Xpath in CDA document
	In Discharge Summaries the convention is now that this represents the discharge date of the individual	
Size	Only for ITI 42	
sourcePatientId	IHI Number	/cda:ClinicalDocument/cda:recordTarget/cda:patientRole/cda:patient/ext:asEntityIdentifier[@classCode='IDENT']/ext:id[@assigningAuthorityName='IHI']/@root
Title	Document Title	/cda:ClinicalDocument/cda:title
typeCode	Document Type	/cda:ClinicalDocument/cda:code/@code
typeCodeDisplayName	(See Appendix A)	/cda:ClinicalDocument/cda:code/@displayName
uniqueId	Document Unique Id	/cda:ClinicalDocument/cda:id/@root and then convert to 2.25.N where N is a decimal form of the UUID /cda:ClinicalDocument/cda:id/@extension add this to end of OID if exists oid^extension

D.1.1 Example of Amending a Document

Example:

Example of a document being amended with a *ProvideAndRegisterDocumentRequest*.

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope">
  <s:Header>
    <Action xmlns="http://www.w3.org/2005/08/addressing" xmlns:a="http://www.w3.org/2003/05/soap-envelope" a:mustUnderstand="1">urn:ihe:iti:2007:ProvideAndRegisterDocumentSet-b</Action>
    <h:PCEHRHeader xmlns:h="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema" xml:id="user-99a7dad6-b5d1-4a24-857c-85e297e3289b">
      <User>
        <IDType>HPII</IDType>
        <ID>8003614166668846</ID>
```

```
        <userName>John Doe</userName>
        <useRoleForAudit>false</useRoleForAudit>
      </User>
      <ihiNumber>8003601243017717</ihiNumber>
      <productType>
        <vendor>Oracle</vendor>
        <productName>dummyCISusr1</productName>
        <productVersion>dummyCISusrV1</productVersion>
        <platform>Windows XP</platform>
      </productType>
      <clientSystemType>CIS</clientSystemType>
      <accessingOrganisation>
        <organisationID>8003620833337558</organisationID>
        <organisationName>Local Practice</organisationName>
      </accessingOrganisation>
    </h:PCEHRHeader>
    <h:signature ............
    </h:signature>
    ..............
    <MessageID xmlns="http://www.w3.org/2005/08/addressing">urn:uuid:1cea1b32-2968-4fa8-9a56-fc08ab7b0cfa</MessageID>
    ..............
  </s:Header>
  <s:Body xml:id="body-14f57ac5-ec40-4b8f-ac0c-2b64c6b49f00">
    <ProvideAndRegisterDocumentSetRequest xmlns="urn:ihe:iti:xds-b:2007">
      <SubmitObjectsRequest xmlns="urn:oasis:names:tc:ebxml-regrep:xsd:lcm:3.0">
        <RegistryObjectList xmlns="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0">
          <ExtrinsicObject mimeType="application/zip" objectType="urn:uuid:7edca82f-054d-47f2-a032-9b2a5b5186c1" id="D
OCUMENT_SYMBOLICID_01">
            <Slot name="creationTime">
              <ValueList>
                <Value>201112011100</Value>
              </ValueList>
            </Slot>
            <Slot name="languageCode">
              <ValueList>
                <Value>en-AU</Value>
              </ValueList>
            </Slot>
            <Slot name="serviceStartTime">
              <ValueList>
                <Value>201112011100</Value>
              </ValueList>
```

```
            </Slot>
            <Slot name="sourcePatientId">
              <ValueList>
                <Value>8003601243017717^^^&amp;1.2.36.1.2001.1003.0&amp;ISO</Value>
              </ValueList>
            </Slot>
            <Name>
              <LocalizedString value="Shared Health Summary"/>
            </Name>
            <Classification nodeRepresentation="" classifiedObject="DOCUMENT_SYMBOLICID_01" classificationScheme="urn:
uuid:93606bcf-9494-43ec-9b4e-a7748d1a838d" id="cl01">
              <Slot name="authorInstitution">
                <ValueList>
                  <Value>
                    Bodalla Clinic^^^^^^^^^1.2.36.1.2001.1003.0.8003620833337558
                  </Value>
                </ValueList>
              </Slot>
              <Slot name="authorPerson">
                <ValueList>
                  <Value>
                    ^Bagshaw^Todd^^^Dr.^^^^&amp;1.2.36.1.2001.1003.0.8003614166668846&amp;ISO
                  </Value>
                </ValueList>
              </Slot>
            </Classification>
            <Classification nodeRepresentation="60591-5" classifiedObject="DOCUMENT_SYMBOLICID_01" classificationSchem
e="urn:uuid:41a5887f-8865-4c09-adf7-e362475b143a" objectType="urn:oasis:names:tc:ebxml-regrep:ObjectType:RegistryObjec
t:Classification" id="cl02">
              <Slot name="codingScheme">
                <ValueList>
                  <Value>LOINC</Value>
                </ValueList>
              </Slot>
              <Name>
                <LocalizedString value="Patient Summary"/>
              </Name>
            </Classification>
            <Classification nodeRepresentation="1.3.6.1.4.1.21367.2006.7.101" classifiedObject="DOCUMENT_SYMBOLICID_01
" classificationScheme="urn:uuid:f4f85eac-e6cb-4883-b524-f2705394840f" objectType="urn:oasis:names:tc:ebxml-regrep:Obj
ectType:RegistryObject:Classification" id="cl03">
              <Slot name="codingScheme">
```

```
                <ValueList>
                  <Value>PCEHR_DocAccessLevels</Value>
                </ValueList>
              </Slot>
              <Name>
                <LocalizedString value="NA"/>
              </Name>
            </Classification>
            <Classification nodeRepresentation="1.2.36.1.2001.1006.1.16565.1" classifiedObject="DOCUMENT_SYMBOLICID_01
" classificationScheme="urn:uuid:a09d5840-386c-46f2-b5ad-9c3699a4309d" objectType="urn:oasis:names:tc:ebxml-regrep:Obj
ectType:RegistryObject:Classification" id="cl04">
              <Slot name="codingScheme">
                <ValueList>
                  <Value>PCEHR_FormatCodes</Value>
                </ValueList>
              </Slot>
              <Name>
                <LocalizedString value="SHS"/>
              </Name>
            </Classification>
            <Classification nodeRepresentation="8401" classifiedObject="DOCUMENT_SYMBOLICID_01" classificationScheme="
urn:uuid:f33fb8ac-18af-42cc-ae0e-ed0b0bdb91e1" objectType="urn:oasis:names:tc:ebxml-regrep:ObjectType:RegistryObject:C
lassification" id="cl05">
              <Slot name="codingScheme">
                <ValueList>
                  <Value>ANZSIC</Value>
                </ValueList>
              </Slot>
              <Name>
                <LocalizedString value="Hospitals (except Psychiatric Hospitals)"/>
              </Name>
            </Classification>
            <Classification nodeRepresentation="8401-6" classifiedObject="DOCUMENT_SYMBOLICID_01" classificationScheme
="urn:uuid:cccf5598-8b07-4b77-a05e-ae952c785ead" objectType="urn:oasis:names:tc:ebxml-regrep:ObjectType:RegistryObject
:Classification" id="cl06">
              <Slot name="codingScheme">
                <ValueList>
                  <Value>ANZSIC</Value>
                </ValueList>
              </Slot>
              <Name>
                <LocalizedString value="Hospital (except psychiatric or veterinary hospitals)"/>
```

```
            </Name>
          </Classification>
          <Classification nodeRepresentation="60591-5" classifiedObject="DOCUMENT_SYMBOLICID_01" classificationSchem
e="urn:uuid:f0306f51-975f-434e-a61c-c59651d33983" objectType="urn:oasis:names:tc:ebxml-regrep:ObjectType:RegistryObjec
t:Classification" id="cl07">
            <Slot name="codingScheme">
              <ValueList>
                <Value>LOINC</Value>
              </ValueList>
            </Slot>
            <Name>
              <LocalizedString value="Patient Summary"/>
            </Name>
          </Classification>
          <ExternalIdentifier value="8003601243017717^^^&amp;1.2.36.1.2001.1003.0&amp;ISO" identificationScheme="urn
:uuid:58a6f841-87b3-4a3e-92fd-a8ffeff98427" registryObject="DOCUMENT_SYMBOLICID_01" objectType="urn:oasis:names:tc:ebx
ml-regrep:ObjectType:RegistryObject:ExternalIdentifier" id="ei01">
            <Name>
              <LocalizedString value="XDSDocumentEntry.patientId"/>
            </Name>
          </ExternalIdentifier>
          <ExternalIdentifier value="2.25.904709174158138578953389279361997821 61" identificationScheme="urn:uuid:2e8
2c1f6-a085-4c72-9da3-8640a32e42ab" registryObject="DOCUMENT_SYMBOLICID_01" objectType="urn:oasis:names:tc:ebxml-regrep
:ObjectType:RegistryObject:ExternalIdentifier" id="ei02">
            <Name>
              <LocalizedString value="XDSDocumentEntry.uniqueId"/>
            </Name>
          </ExternalIdentifier>
        </ExtrinsicObject>
        <RegistryPackage objectType="urn:oasis:names:tc:ebxml-regrep:ObjectType:RegistryObject:RegistryPackage" id="
SUBSET_SYMBOLICID_01">
          <Slot name="submissionTime">
            <ValueList>
              <Value>20120625151337</Value>
            </ValueList>
          </Slot>
          <Classification nodeRepresentation="" classifiedObject="SUBSET_SYMBOLICID_01" classificationScheme="urn:uu
id:a7058bb9-b4e4-4307-ba5b-e3f0ab85e12d" id="cl08">
            <Slot name="authorInstitution">
              <ValueList>
                <Value>
                  Bodalla Clinic^^^^^^^^^1.2.36.1.2001.1003.0.8003620833337558
```

```
                  </Value>
                </ValueList>
              </Slot>
              <Slot name="authorPerson">
                <ValueList>
                  <Value>
                    ^Bagshaw^Todd^^^Dr.^^^^&amp;1.2.36.1.2001.1003.0.8003614166668846&amp;ISO
                  </Value>
                </ValueList>
              </Slot>
            </Classification>
            <Classification nodeRepresentation="60591-5" classifiedObject="SUBSET_SYMBOLICID_01" classificationScheme=
"urn:uuid:aa543740-bdda-424e-8c96-df4873be8500" objectType="urn:oasis:names:tc:ebxml-regrep:ObjectType:RegistryObject:
Classification" id="cl09">
              <Slot name="codingScheme">
                <ValueList>
                  <Value>LOINC</Value>
                </ValueList>
              </Slot>
              <Name>
                <LocalizedString value="Patient Summary"/>
              </Name>
            </Classification>
            <ExternalIdentifier value="2.25.904709174158138578953389279361997821 61" identificationScheme="urn:uuid:96f
dda7c-d067-4183-912e-bf5ee74998a8" registryObject="SUBSET_SYMBOLICID_01" objectType="urn:oasis:names:tc:ebxml-regrep:O
bjectType:RegistryObject:ExternalIdentifier" id="ei03">
              <Name>
                <LocalizedString value="XDSSubmissionSet.uniqueId"/>
              </Name>
            </ExternalIdentifier>
            <ExternalIdentifier value="1.2.36.1.2001.1003.0.8003620833337558" identificationScheme="urn:uuid:554ac39e-
e3fe-47fe-b233-965d2a147832" registryObject="SUBSET_SYMBOLICID_01" objectType="urn:oasis:names:tc:ebxml-regrep:ObjectT
ype:RegistryObject:ExternalIdentifier" id="ei04">
              <Name>
                <LocalizedString value="XDSSubmissionSet.sourceId"/>
              </Name>
            </ExternalIdentifier>
            <ExternalIdentifier value="8003601243017717^^^&amp;1.2.36.1.2001.1003.0&amp;ISO" identificationScheme="urn
:uuid:6b5aea1a-874d-4603-a4bc-96a0a7b38446" registryObject="SUBSET_SYMBOLICID_01" objectType="urn:oasis:names:tc:ebxml
-regrep:ObjectType:RegistryObject:ExternalIdentifier" id="ei05">
              <Name>
                <LocalizedString value="XDSSubmissionSet.patientId"/>
```

```
            </Name>
          </ExternalIdentifier>
        </RegistryPackage>
        <Classification classificationNode="urn:uuid:a54d6aa5-d40d-43f9-88c5-b4633d873bdd" classifiedObject="SUBSET_
SYMBOLICID_01" objectType="urn:oasis:names:tc:ebxml-regrep:ObjectType:RegistryObject:Classification" id="cl10"/>
        <Association targetObject="DOCUMENT_SYMBOLICID_01" sourceObject="SUBSET_SYMBOLICID_01" associationType="urn:
oasis:names:tc:ebxml-regrep:AssociationType:HasMember" objectType="urn:oasis:names:tc:ebxml-regrep:ObjectType:Registry
Object:Association" id="as01">
          <Slot name="SubmissionSetStatus">
            <ValueList>
              <Value>Original</Value>
            </ValueList>
          </Slot>
        </Association>
        <Association targetObject="urn:uuid:5757af9d-2e97-4eba-a675-d1da787e29f6" sourceObject="DOCUMENT_SYMBOLICID_
01" associationType="urn:ihe:iti:2007:AssociationType:RPLC" objectType="urn:oasis:names:tc:ebxml-regrep:ObjectType:Reg
istryObject:Association" id="as02">
          <Name>
            <LocalizedString value="Replace Document"/>
          </Name>
        </Association>
      </RegistryObjectList>
    </SubmitObjectsRequest>
    <Document id="DOCUMENT_SYMBOLICID_01">
      UEsDBBQ.............ch0AAAAA
    </Document>
  </ProvideAndRegisterDocumentSetRequest>
 </s:Body>
</s:Envelope>
```

D.2 XDSSubmissionSet

The XDSSubmissionSet values can be fully populated from details within the CDA document.

Table 50: XDS Submission Set

Field	Description	Xpath in CDA document
author:authorInstitution	Author Org HPIO	/cda:ClinicalDocument/cda:author/cda:assignedAuthor/cda:assignedPerson/ext:asEmployment/ext:employerOrganization/cda:asOrganizationPartOf/cda:wholeOrganization/ext:asEntityIdentifier[@classCode='IDENT']/ext:id[@assigningAuthorityName='HPI O']/@root
author:authorPerson	Author HPII	/cda:ClinicalDocument/cda:author/cda:assignedAuthor/cda:assignedPerson/ext:asEntityIdentifier[@classCode='IDENT']/ext:id[@assigningAuthorityName='HPI I']/@root
	Author Family Name	/cda:ClinicalDocument/cda:author/cda:assignedAuthor/cda:assignedPerson/cda:name/family
	Author Given Name	/cda:ClinicalDocument/cda:author/cda:assignedAuthor/cda:assignedPerson/cda:name/given[1]
	Author Prefix	/cda:ClinicalDocument/cda:author/cda:assignedAuthor/cda:assignedPerson/cda:name/prefix
contentTypeCode	Document Type (See Table 7)	/cda:ClinicalDocument/cda:code/@code
contentTypeCodeDisplayName	Document Type Description	/cda:ClinicalDocument/cda:code/@displayName
entryUUID	Fixed: "SUBSET_SYMBOLICID_01"	[PCEHR Generates UUID when receives document]
patientId	IHI Number	/cda:ClinicalDocument/cda:recordTarget/cda:patientRole/cda:patient/ext:asEntityIdentifier[@classCode='IDENT']/ext:id[@assigningAuthorityName='IHI']/@root
sourceId	Author Org HPIO	/cda:ClinicalDocument/cda:author/cda:assignedAuthor/cda:assignedPerson/ext:asEmployment/ext:employerOrganization/cda:asOrganizationPartOf/cda:wholeOrganization/ext:asEntityIdentifier[@classCode='IDENT']/ext:id[@assigningAuthorityName='HPI O']/@root

Field	Description	Xpath in CDA document
submissionTime	current DateTime	In UTC format
uniqueId	Convert from UUID to OID	/cda:ClinicalDocument/cda:id/@root and then convert to 2.25.N where N is a decimal form of the UUID /cda:ClinicalDocument/cda:id/@extension add this to end of OID if exists oid^extension OID^extension

D.2.1 Example of a FindDocuments Query Type

Example of FindDocuments query:

Finding the approved status documents for a particular IHI number. The documents' metadata will be returned as extrinsic objects, as the ObjectResponse is specified as LeafClass.

```
<?xml version="1.0" encoding="utf 8"?>
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap envelope" xmlns:a="http://www.w3.org/2005/08/addressing" xmlns:h="htt
p://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0">
  <s:Header>
    <a:Action s:mustUnderstand="1">urn:ihe:iti:2007:RegistryStoredQuery</a:Action>
    <h:PCEHRHeader xml:id="user 878daa08 e20d 41b8 b355 ff43e8d31473">
      <User>
        <IDType>HPII</IDType>
        <ID>8003619166674595</ID>
        <userName>John Doe</userName>
        <useRoleForAudit>false</useRoleForAudit>
      </User>
      <ihiNumber>8003601243017717</ihiNumber>
      <productType>
        <vendor>Oracle</vendor>
        <productName>dummyCISusr1</productName>
        <productVersion>dummyCISusrV1</productVersion>
        <platform>Windows XP</platform>
      </productType>
      <clientSystemType>CIS</clientSystemType>
      <accessingOrganisation>
        <organisationID>8003620833337558</organisationID>
        <organisationName>The Local Practice</organisationName>
      </accessingOrganisation>
```

```
    </h:PCEHRHeader>
    <h:signature> ....</h:signature>
    <h:timestamp xml:id="time 60ecfdf2 cd6a 4685 9cb5 72fc627ff432">
      <created>2012 05 20T22:46:11.4992806+10:00</created>
    </h:timestamp>
    <a:MessageID>urn:uuid:2dc2ee30 98b5 4e3d a7b2 8cbf0645d31d</a:MessageID>
    <a:ReplyTo>
      <Address>http://www.w3.org/2005/08/addressing/anonymous</Address>
    </a:ReplyTo>
    <a:From>
      <Address>http://www.w3.org/2005/08/addressing/anonymous</Address>
    </a:From>
    <a:To s:mustUnderstand="1">http://www.w3.org/2005/08/addressing/anonymous</a:To>
  </s:Header>
  <s:Body xml:id="body b9f8ea9c be48 4d90 a627 f2ab6afa50b1">
    <AdhocQueryRequest xmlns="urn:oasis:names:tc:ebxml regrep:xsd:query:3.0">
      <ResponseOption returnType="LeafClass"/><
        <AdhocQuery id="urn:uuid:14d4debf 8f97 4251 9a74 a90016b0af0d" xmlns="urn:oasis:names:tc:ebxml regrep:xsd:rim:3.0
">
        <Slot name="$XDSDocumentEntryPatientId">
          <ValueList>
            <Value>'8003601243017717^^^&amp;amp;1.2.36.1.2001.1003.0&amp;amp;ISO'</Value>
          </ValueList>
        </Slot>
        <Slot name="$XDSDocumentEntryStatus">
          <ValueList>
            <Value>('urn:oasis:names:tc:ebxml regrep:StatusType:Approved')</Value>
          </ValueList>
        </Slot>
      </AdhocQuery>
    </AdhocQueryRequest>
  </s:Body>
</s:Envelope>
```

Example of FindDocuments response

Here, a set of Extrinsic Objects is returned for those documents of belonging to the IHI number in the query that are accessible by the Accessing Organisation. See the XML sample on pages 45-51 for a typical Extrinsic Object. Also see Appendix D.1 for the structure XDS.b structure of the Extrinsic Objects returned by the system.

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap envelope">
  <soap:Header xmlns:wsa="http://www.w3.org/2005/08/addressing">
    <wsa:Action>urn:ihe:iti:2007:RegistryStoredQueryResponse</wsa:Action>
    <wsa:MessageID>2eb3577f 3e4d 4bfd b55b 7efe257bd45f</wsa:MessageID>
    <wsa:RelatesTo>urn:uuid:6a8bdfd0 7581 4a50 9e9f ecdf1acd9339</wsa:RelatesTo>
    ..............
  </soap:Header>
  <S:Body xmlns:S="http://www.w3.org/2003/05/soap envelope">
    <query:AdhocQueryResponse xmlns:query="urn:oasis:names:tc:ebxml regrep:xsd:query:3.0" status="urn:oasis:names:tc:ebxm
l regrep:ResponseStatusType:Success">
      <rim:RegistryObjectList xmlns:rim="urn:oasis:names:tc:ebxml regrep:xsd:rim:3.0">
        <ns1:ExtrinsicObject xmlns:ns1="urn:oasis:names:tc:ebxml regrep:xsd:rim:3.0" id="urn:uuid:25ae0f42 0677 40a6 bc6c
 58e51d28639a" isOpaque="false" lid="urn:uuid:25ae0f42 0677 40a6 bc6c 58e51d28639a" mimeType="application/zip" objectType
="urn:uuid:7edca82f 054d 47f2 a032 9b2a5b5186c1" status="urn:oasis:names:tc:ebxml regrep:StatusType:Approved">
          ........................
        </ns1:ExtrinsicObject>
        <ns1:ExtrinsicObject xmlns:ns1="urn:oasis:names:tc:ebxml regrep:xsd:rim:3.0" id="urn:uuid:5a70f11c df06 496b 98a7
 2114e09ab31a" isOpaque="false" lid="urn:uuid:5a70f11c df06 496b 98a7 2114e09ab31a" mimeType="application/zip" objectType
="urn:uuid:7edca82f 054d 47f2 a032 9b2a5b5186c1" status="urn:oasis:names:tc:ebxml regrep:StatusType:Approved">
          ........................
        </ns1:ExtrinsicObject>
        <ns1:ExtrinsicObject xmlns:ns1="urn:oasis:names:tc:ebxml regrep:xsd:rim:3.0" id="urn:uuid:0c4be6f8 4e72 4d01 8f91
 d0b6854aaf68" isOpaque="false" lid="urn:uuid:0c4be6f8 4e72 4d01 8f91 d0b6854aaf68" mimeType="application/zip" objectType
="urn:uuid:7edca82f 054d 47f2 a032 9b2a5b5186c1" status="urn:oasis:names:tc:ebxml regrep:StatusType:Approved">
          ......................
        </ns1:ExtrinsicObject>
        ......................
        <ns1:ExtrinsicObject xmlns:ns1="urn:oasis:names:tc:ebxml regrep:xsd:rim:3.0" id="urn:uuid:0c4be6f8 4e72 4d01 8f91
 d0b6854aaf68" isOpaque="false" lid="urn:uuid:0c4be6f8 4e72 4d01 8f91 d0b6854aaf68" mimeType="application/zip" objectType
="urn:uuid:7edca82f 054d 47f2 a032 9b2a5b5186c1" status="urn:oasis:names:tc:ebxml regrep:StatusType:Approved">
        </ns1:ExtrinsicObject>
      </rim:RegistryObjectList>
    </query:AdhocQueryResponse>
  </S:Body>
</soap:Envelope>
```

D.2.2 Example of a GetDocuments Query Type

Example of GetDocuments Query for a single document

The document is identified by the $XDSDocumentEntryUniqueId.

```
<s:Envelope xmlns:s="http://www.w3.org/2003/05/soap-envelope">
  <s:Header>
    <Action xmlns="http://www.w3.org/2005/08/addressing" xmlns:a="http://www.w3.org/2003/05/soap-envelope" a:mustUnderst
and="1">urn:ihe:iti:2007:RegistryStoredQuery</Action>
    <h:PCEHRHeader xmlns:h="http://ns.electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns="http://ns.
electronichealth.net.au/pcehr/xsd/common/CommonCoreElements/1.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" x
mlns:xsd="http://www.w3.org/2001/XMLSchema" xml:id="user-27e05478-ca98-483d-869f-7aeefe9a7a8a">
      <User>
        <IDType>HPII</IDType>
        <ID>8003619166674595</ID>
        <userName>John Doe</userName>
        <useRoleForAudit>false</useRoleForAudit>
      </User>
      <ihiNumber>8003601243017717</ihiNumber>
      <productType>
        <vendor>Oracle</vendor>
        <productName>dummyCISusr1</productName>
        <productVersion>dummyCISusrV1</productVersion>
        <platform>Windows XP</platform>
      </productType>
      <clientSystemType>CIS</clientSystemType>
      <accessingOrganisation>
        <organisationID>8003620833337558</organisationID>
        <organisationName>Local Practice</organisationName>
        <alternateOrganisationName>John Doe</alternateOrganisationName>
      </accessingOrganisation>
    </h:PCEHRHeader>
    <h:signature ..................>
      ...................
    </h:signature>
    ....................
    <MessageID xmlns="http://www.w3.org/2005/08/addressing">urn:uuid:18bca8ae-836d-453a-a79f-c760a03107d8</MessageID>
    ..................
  </s:Header>
  <s:Body xml:id="body-31d1a0eb-e6f6-4667-ac92-b3ca8ce03847">
    <AdhocQueryRequest xmlns="urn:oasis:names:tc:ebxml-regrep:xsd:query:3.0">
```

```
      <ResponseOption returnType="LeafClass"/>
      <AdhocQuery xmlns="urn:oasis:names:tc:ebxml-regrep:xsd:rim:3.0" id="urn:uuid:14d4debf-8f97-4251-9a74-a90016b0af0d"
>
        <Slot name="$XDSDocumentEntryPatientId">
          <ValueList>
            <Value>'8003601243017717^^^&amp;amp;1.2.36.1.2001.1003.0&amp;amp;ISO'</Value>
          </ValueList>
        </Slot>
        <Slot name="$XDSDocumentEntryStatus">
          <ValueList>
            <Value>
              ('urn:oasis:names:tc:ebxml-regrep:StatusType:Approved')
            </Value>
          </ValueList>
        </Slot>
      </AdhocQuery>
    </AdhocQueryRequest>
  </s:Body>
</s:Envelope>
```

Example of GetDocumentsReply

This is the response to the query quoted on pages 149-150. Here the Extrinsic Object is given in full.

```
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope">
  <soap:Header>
    <wsa:Action xmlns:wsa="http://www.w3.org/2005/08/addressing">urn:ihe:iti:2007:RegistryStoredQueryResponse</wsa:Actio
n>
    <wsa:MessageID xmlns:wsa="http://www.w3.org/2005/08/addressing">
      uuid:Id-0001340071471898-7ec645ea4fdfde2f0c69ff17-1
    </wsa:MessageID>
    <wsa:RelatesTo xmlns:wsa="http://www.w3.org/2005/08/addressing">urn:uuid:18bca8ae-836d-453a-a79f-c760a03107d8</wsa:R
elatesTo>
    <soap:Header xmlns:wsa="http://www.w3.org/2005/08/addressing">
      <wsa:Action xmlns:a="http://www.w3.org/2003/05/soap-envelope" a:mustUnderstand="1">urn:ihe:iti:2007:RegistryStored
Query</wsa:Action>
      <wsa:MessageID>urn:uuid:227f1d98-a949-49ed-ab65-82b384d98516</wsa:MessageID>
      <wsa:RelatesTo>urn:uuid:18bca8ae-836d-453a-a79f-c760a03107d8</wsa:RelatesTo>
      <wsa:ReplyTo>
        <wsa:Address>http://www.w3.org/2005/08/addressing/anonymous</wsa:Address>
      </wsa:ReplyTo>
```

```
      <wsa:From>
        <wsa:Address>http://www.w3.org/2005/08/addressing/anonymous</wsa:Address>
      </wsa:From>
      <wsa:To xmlns:s="http://www.w3.org/2003/05/soap-envelope" s:mustUnderstand="1">https://144.140.140.218/getDocument
List</wsa:To>
    </soap:Header>
    <ns:signature ............>
        ..............
    </ns:signature>
  </soap:Header>
  <soap:Body xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xml:id="Id-0001340071471898-7ec645ea4fdfde2f0c69ff17-2"
>
    <ns8:AdhocQueryResponse xmlns:ns4="urn:hl7-org:v3" xmlns:ns3="http://common.pna.ws.pcehr.au/" xmlns:ns9="http://comm
on.htb.ws.pcehr.au/" xmlns:ns5="http://ns.electronichealth.net.au/Ci/Cda/Extensions/3.0" xmlns:ns6="urn:oasis:names:tc:e
bxml-regrep:xsd:rim:3.0" xmlns:ns10="http://view.htb.ws.pcehr.au/" xmlns:ns7="urn:oasis:names:tc:ebxml-regrep:xsd:rs:3.0
" xmlns:ns8="urn:oasis:names:tc:ebxml-regrep:xsd:query:3.0" status="urn:oasis:names:tc:ebxml-regrep:ResponseStatusType:S
uccess">
      <ns6:RegistryObjectList>
        <ns6:ExtrinsicObject isOpaque="false" mimeType="application/zip" status="urn:oasis:names:tc:ebxml-regrep:StatusT
ype:Approved" objectType="urn:uuid:7edca82f-054d-47f2-a032-9b2a5b5186c1" lid="urn:uuid:e6c40098-367f-42d6-b2bd-aff3b3a17
c1a" id="urn:uuid:e6c40098-367f-42d6-b2bd-aff3b3a17c1a">
          ..............
        </ns6:ExtrinsicObject>
      </ns6:RegistryObjectList>
    </ns8:AdhocQueryResponse>
  </soap:Body>
</soap:Envelope>
```

Appendix E Web Service Errors

Table 51: Web service errors

errorCode	codeContext	Explanation
badWsaMessageId	PCEHR_ERROR_0001 - Message ID element is missing	Missing Message Id
badlyFormedMsg	PCEHR_ERROR_0002 - SOAP header fault	Incorrect SOAP Header
badlyFormedMsg	PCEHR_ERROR_0003 - SOAP body fault	Incorrect SOAP Body
notAuthorised	PCEHR_ERROR_0004 - Authorisation denied	Denied Access
serviceTemporaryUnavailable	PCEHR_ERROR_0005 - Back end system temporary unavailable	Service Unavailable
badParam	PCEHR_ERROR_0006 - Invalid common parameter	A parameter is not in a valid format
badParam	PCEHR_ERROR_0007 - Invalid IHI	IHI is not in the valid format
badParam	PCEHR_ERROR_0008 - Invalid HPI-I	HPI-I is not in the valid format
badParam	PCEHR_ERROR_0009 - Invalid HPI-O	HPI-O is not in the valid format
badlyFormedMsg	PCEHR_ERROR_0010 - The request did not contain the expected message format	Incorrect SOAP Request
serviceTemporaryUnavailable	PCEHR_ERROR_0011 - Unexpected service exception error	PCEHR System Error
serviceTemporaryUnavailable	PCEHR_ERROR_0012 - Unexpected back end exception error	PCEHR System Error
serviceTemporaryUnavailable	PCEHR_ERROR_0013 - Invalid back end response	PCEHR System Error

errorCode	codeContext	Explanation
serviceTemporaryUnavailable	PCEHR_ERROR_0014 - Unknown back end error code	PCEHR System Error
badParam	PCEHR_ERROR_0503 - User name for audit element is missing	Incorrect PCEHR Header
badParam	PCEHR_ERROR_0504 - User role for audit element is missing	Incorrect PCEHR Header
serviceTemporaryUnavailable	PCEHR_ERROR_0507 - Unexpected service exception error	PCEHR System Error
badParam	PCEHR_ERROR_0511 - ClientSystemType is missing	Incorrect PCEHR Header
badWsaAction	PCEHR_ERROR_0513 - Invalid WS-addressing action	Invalid WS-Addressing
badWsaTo	PCEHR_ERROR_0514 - WS-addressing "to" field is missing	Invalid WS-Addressing
notAuthorised	PCEHR_ERROR_0519 - System authorisation denied	Access Denied
badSignature	PCEHR_ERROR_0520 - The SOAP request has not been signed, or is signed incorrectly	Invalid ATS5821 Signature
badAlgorithmC14N	PCEHR_ERROR_0521 - The algorithm used for canonicalizing the data is not acceptable	Invalid ATS5821 Signature
badAlgorithmDigest	PCEHR_ERROR_0522 - The algorithm used for calculating the digest is not acceptable	Invalid ATS5821 Signature
badAlgorithmSignature	PCEHR_ERROR_0523 - The algorithm used for signing is not acceptable	Invalid ATS5821 Signature

Appendix F System Business Scenarios

In this section, Table 52 provides a summary of the PCEHR related use cases. For the detailed description of the applicable use cases, refer to the document "Clinical Information Systems Connecting to the PCEHR System Use Cases".

Table 52: Business scenarios

Business Scenario	Description	Use Case Reference
Verify that a PCEHR Exists	To verify whether a given PCEHR exists.	3.1 UC.CIS.001 – Check if an advertised PCEHR exists
Gain Access to a PCEHR For the First Time	To gain access to an individual's PCEHR for the first time. Depending on how an individual has set their access control settings, the node of gaining access is: • **Open Access** – A healthcare provider has unrestricted access to an individual's PCEHR and, as a result, the provider is granted "General Access." • **RAC Access** (formerly called PACC Access) – a healthcare provider must provide an RAC (Restricted Access Code) granted by an individual. The access level granted here is "General Access". • **LDAC Access** (formerly called PACCX Access) – a healthcare provider is able to access an individual's PCEHR when granted a LDAC (Limited Document Access Code) by the individual. The access level granted here is "Limited Access".	3.2 UC.CIS.002 – Gain Access to PCEHR
Gain Access to a PCEHR Using "Emergency Access"	Regardless of how an individual has set their access control settings, "Emergency Access" bypasses all control settings. A healthcare provider is able to access an individual's PCEHR by asserting "Emergency Access" and the access level granted here is "Limited Access."	3.2 UC.CIS.002 – Gain Access to PCEHR
Subsequent Access to a PCEHR	Once access to an individual's PCEHR was established, that access persists until it expires or until the individual decides to revoke that access.	3.2 UC.CIS.002 – Gain Access to PCEHR

Re-Authorise Access to a PCEHR	Once an individual's PCEHR has been opened, the provider's access level can still be altered through the provision by the individual of a different code. This upgrades the original access level from "General Access" to "Limited Access" if the new code is of type LDAC; or downgrades the level from "Limited Access" to "General Access" if the new one is a RAC.	3.2 UC.CIS.002 – Gain Access to PCEHR
Retrieve a Clinical Document	A clinical document is retrieved from the PCEHR System for a given individual's PCEHR. A healthcare provider is only able to access a document with access level that is consistent with the provider's except if the provider is the author of the document. Situations can be: If the provider is not the authorising organisation for the document, the document the provider can access will depend on the access level that provider has. If the provider's access level is "General Access", the document they are able to access has to be "General Access"; if the provider has "Limited Access", then the provider can access documents marked as "General Access" or "limited Access". If the provider is the authorising organisation for the document, that document is always accessible to the provider regardless which access level the document has.	4.4 UC.CIS.204 – Download a Clinical Document
Search for a Clinical Document	A search is conducted for a document based on certain search criteria set in the PCEHR System. The criteria should be based on the parameters available in the index view.	4.4 UC.CIS.204 – Download a Clinical Document

Upload a Clinical Document	A Clinical Document is uploaded to an individual's PCEHR. The document types scoped are: Shared Health Summary; Event Summary; and Discharge Summary. Uploading a document is initiated within the local system, meaning the activity can be performed by a healthcare provider regardless of their access level to the individual's PCEHR, or whether their access has been revoked. A clinical document for uploading can be a new document or an amended existing one. However, different business rules apply depending on the type of the document, whether new or amended. Typical scenarios are: • A new document is not allowed to be uploaded to a PCEHR that is deactivated but amendment is permitted; • An amendment can be uploaded to a document that has been removed. This is to ensure the completeness of the document set. Upon receiving a document, the PCEHR system will set the new document's access level to the default. The default access level – either "General Access" or "Limited Access" –depends on the which of the following circumstances applies: • If the healthcare provider has never before accessed the individual's PCEHR, the default access level will be "General Access". • If the healthcare provider has accessed the individual's PCEHR before – that is, the provider is on the individual's "Provider Access List" – and depending on how the individual set the default and write access level for that provider, the PCEHR system shall use those access levels for that document. • If the healthcare provider's access has been revoked, the default access level of an upload by the provider will be "General Access". The exception is the Shared Health Summary whose access level is always "General Access." If the uploaded document is an amendment, the access level of this document will inherit its predecessor's.	4.1 UC.CIS.201 – Upload a Clinical Document 4.2 UC.CIS.202 – Supersede a clinical document

Remove a Clinical Document	A clinical document is removed for various reasons. A reason for removal must be provided when requesting a document removal. The options available for the reasons for removal in the PCEHR System are: • Incorrect Identity • Elect to remove • Withdrawn Only the provider that has authorised the document (as well as the individual owner of the PCEHR) can remove it. A removed document can still be viewed by its authorising individual healthcare provider but not by other providers. To reinstate a document once it has been removed, its authoring organisation must contact the PCHER System Operator.	4.3 UC.CIS.203 – Remove a Clinical Document
Index View	This case is where all the documents that a provider is authorised to access for a given PCEHR are retrieved and presented in an index view listing. The content of the index view is: • Event Date (i.e.: date of the actual event) • Date and time that the document was created and signed • Document type (e.g.: Discharge Summary, Event Summary, etc.) • Organisation role (e.g.: General Practice, Hospital, etc.) • Healthcare role of authoring individual (e.g. Endocrinologist) • Name of the authoring organisation • Name of the authoring individual	4.4 UC.CIS.204 – Download a Clinical Document

Appendix G Acronyms and Terminology

G.1 Acronyms

Acronym	Explanation
API	Application Program Interface
CDA	Clinical Document Architecture
CIS	Clinical Information System
CSP	Contracted Service Providers
DoHA	Department of Health and Aging, the Australian Government.
DVA	Department of Veteran Affairs, the Australian Government
IHE	Integrating the Healthcare Enterprise
ITI	IT Infrastructure – part of the IHE initiative
Jehdi	Joint eHealth Data Information, an eHealth initiative by the Australia Defense Forces (ADF)
LDAC	Limited Document Access Code
LSS	Logical Service Specification, a type of PCEHR specification released by Nehta.
MTOM	Message Transmission Optimisation Mechanism
Nehta	The National eHealth Transition Authority
OID	Object Identifier
PACC	An obsolete term. Now called RAC (Record Access Code)
PACCX	An obsolete term. Now called LDAC (Limited Document Access Code)
PCEHR	Personally Controlled Electronic Health Record
RAC	Record Access Code
TLS	Transport Layer Security
TSS	Technical Service Specification, a type of PCEHR specification released by Nehta.
WSDL	Web Service Definition Language
XDS.b	Cross-Enterprise Document Sharing-b
XML	Extensible Markup Language

G.2 Specialised Terminology

Term	Explanation
B2B	Business to Business. The name of the webservices used for transactions between distributed components of the PCEHR System
Clinical Information Systems	Information systems used in-house by hospitals and healthcare practices for the provision of patient care .
Registered Repositories	Third party certified data repositories that store and provide PCEHR data.
Invoker role	A B2B invoker sends queries and receives responses.
Message	A message represents the data structure passed from its sender to its recipients. The structure of a message is defined in a service description. http://www.w3.org/TR/ws-arch/#message
MIME encoding	Multipurpose Internet Mail Encodings. Now no longer confined to mail messages. Re-encodes 8-bit binary streams into 7-bit ASCII for transmission.
Provider role	A B2B provider sends responses to queries by other providers, as well as sending queries to the PCEHR System. Currently the provider role is not supported by the PCEHR System.
Request	A SOAP message that provides inputs to the PCEHR System. The message is identified by a unique Id.
Response	A SOAP message that provides outputs to a particular request. The message has its own Id and is also associated with the Id of the original request.
SOAP	An XML-based messaging protocol where, in the PCEHR context, a message consists of a SOAP envelope containing a SOAP header and a SOAP main body.
Web Service	Web services provide a standard means of interoperating between different software applications, running on a variety of platforms and/or frameworks. This document defines the architecture: http://www.w3.org/TR/ws-arch/

Appendix H References

Tag	Name	Version Release Date
ATS 5820-2010	eHealth web services profiles	5 March 2010
ATS 5821-2010	E-health XML secured payload profiles	5 March 2010
CCA	Compliance, Conformance and Accreditation	September 2012
Con Ops	Concept of Operations: Relating to the introduction of a Personally Controlled Electronic Health Record System	September 2011
IHE	IHE Australia (http://www.ihe.net.au/) Links to all Australian and International IHE standards.	
MTOM	SOAP Message Transmission Optimization Mechanism W3C Recommendation http://www.w3.org/TR/soap12-mtom/)	25 January 2005
SOAP 1.2	SOAP 1.2 Standards (http://www.w3.org/TR/soap/)	2nd Edition 27 April 2007
Template_LSS	Template Service Interface Logical Service Specification (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=151)	Version 1.0 9 December 2011
Template_PKG	Template Package Technical Specification (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=182)	Version 1.0 30 May 2012
Template_TSS	Template Service Interface Technical Service Specification (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=229)	Version 1.2 26 April 2012
DE LSS	PCEHR Document Exchange Service Inteface (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=147)	Version 1.1 18 January 2012
DE TSS	PCEHR Document Exchange Service Specification Using the IHE XDS.b Platform (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=184)	Version 1.2 26 April 2012
RA LSS	PCEHR Record Access Service Logical Service Specification (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=148)	Version 1.0 9 December 2011
RA TSS	PCEHR Record Access Technical Service Specification (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=181)	Version 1.3 26 April 2012
Registration LSS	PCEHR Registration Service Logical Service Specification (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=189)	Version 1.0 3 February 2012

Tag	Name	Version Release Date
Registration TSS	PCEHR Registration Service Technical Service Specification (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=228)	Version 1.0 30 May 2012
VS LSS	PCEHR View Service Logical Service Specification (https:/vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=146)	Version 1.1 3 February 2012
VS TSS	PCEHR View Service Technical Service Specification (https://vendors.nehta.gov.au/public/fileServer.cfm?activityContentId=180)	Version 1.3 26 April 2012
Vendor's Site	NEHTA Vendors Site (https://vendors.nehta.gov.au/)	