eReferral

# Release Note v1.4.1

18 August 2014

Approved for external information



## EP-1747:2014 eReferral v1.4.1

### Release rationale

This incremental release of the eReferral end product introduces the *Template Package Library* as a new product component. This version of the template package library contains all template packages available for the eReferral document type at the time of publication.

Of those template packages, the following are aligned with *eReferral - PCEHR Conformance Profile v1.4*[1]:

| Document type variant | Conformance level | Template package ID |
|---|---|---|
| HPIIRelaxed | 1A | 1.2.36.1.2001.1006.1.21000.13 |
| HPIIRelaxed | 1B | 1.2.36.1.2001.1006.1.21000.14 |
| HPIIRelaxed | 2 | 1.2.36.1.2001.1006.1.21000.15 |
| HPIIRelaxed | 3A | 1.2.36.1.2001.1006.1.21000.16 |
| HPIIRelaxed | 3B | 1.2.36.1.2001.1006.1.21000.17 |
| default | 1A | 1.2.36.1.2001.1006.1.21000.18 |
| default | 1B | 1.2.36.1.2001.1006.1.21000.19 |
| default | 2 | 1.2.36.1.2001.1006.1.21000.20 |
| default | 3A | 1.2.36.1.2001.1006.1.21000.21 |
| default | 3B | 1.2.36.1.2001.1006.1.21000.22 |

Future versions of the template package library will contain template packages aligned with the latest version of the PCEHR Conformance Profile, but not previous versions.

The full list of published template packages can be found in the *Template Package Directory*[2] published as part of the *Common – Clinical Document* end product.

[1] https://www.nehta.gov.au/implementation-resources/clinical-documents/EP-1431-2013/NEHTA-1449-2013
[2] https://www.nehta.gov.au/implementation-resources/clinical-documents/EP-1754-2014/NEHTA-1738-2014

## Package inclusions

### New

| Identifier | Name |
|---|---|
| NEHTA-1770:2014 | *eReferral – Template Package Library v1.4* |

### Updated (supersedes previous version)

| Identifier | Name |
|---|---|
| NEHTA-1771:2014 | *eReferral - Release Note v1.4.1* (this document) |

### No change

| Identifier | Name | Version |
|---|---|---|
| NEHTA-1155:2011 | *eReferral - Business Requirements Specification* | 1.1 |
| NEHTA-0967:2012 | *eReferral - CDA Implementation Guide* | 2.2 |
| NEHTA-0968:2011 | *eReferral - Core Information Components* | 1.1.3 |
| NEHTA-0571:2009 | *eReferral - Environmental Scan - Overview* | 1.0 |
| NEHTA-1272:2013 | *eReferral - FAQ eReferral Resolution Flag* | 1.1 |
| NEHTA-1067:2011 | *eReferral - FAQ Vendor advice regarding eReferral questions* | 1.2 |
| NEHTA-0969:2012 | *eReferral - P2P Delivery Technical Service Specification* | 1.3 |
| NEHTA-1449:2013 | *eReferral – PCEHR Conformance Profile v1.4* | 1.4 |
| NEHTA-0971:2011 | *eReferral - Structured Content Specification* | 2.1 |

### Removed

None

This end product has a dependency on *Clinical Documents - Common Conformance Profile v1.4*[3] published as part of the *Common – Clinical Document* end product.

## Scope

The scope of the eReferral end product has not changed as part of this release.

## Stakeholders

The updates performed for this incremental release of the end product did not warrant any stakeholder consultations.

## Audience

- Implementers of clinical systems producing or consuming eReferral clinical documents
- Senior managers and policy makers, clinical experts, health information managers, IT operations and support teams, and system integrators
- Technical and non-technical readers

[3] https://www.nehta.gov.au/implementation-resources/clinical-documents/EP-1457-2013/NEHTA-1446-2013

### Known issues

None known

## Support

For further support or to provide feedback, please email help@nehta.gov.au.

## Future releases

Increased uptake and implementation of the specifications provided as part of this end product are expected to result in the need to further update and improve these specifications. Any such updates will be managed through the joint change control process operated by the Commonwealth Department of Health.

In addition to changes managed through the joint change control process, NEHTA may provide supplementary implementation guidance for the specifications of this end product. Such information will be added to the end product as additional or updated product components and published as an incremental release of the end product (version identifier 1.4.x).

# Previous releases

## EP-1431:2013 eReferral v1.4

Release note: NEHTA-1440:2013, 9 October 2013

## Release rationale

This release of the eReferral end product introduces updates to the conformance profile for eReferral documents, as mandated by the following approved change requests.

More detailed information about the referenced change requests is provided in the *Capabilities* section of this document and can be accessed by following the provided hyperlinks.

| Change Request ID | Change request title | Impact on this release |
|---|---|---|
| CCB-0116 | Relaxation of the mandatory use of HPI-Is in uploaded documents | New conformance requirement added for inclusion of local identifier in case of HPI-I omission |
| CCB-0222 | Support for CSP Certificates in CDA Documents | Removed conformance requirements for digital signatures.<br>This requirement has been replaced with an expanded conformance requirement in the *Clinical Documents - Common Conformance Profile v1.4*. |

The name of this end product has been aligned with the naming conventions for other NEHTA end products containing specifications for clinical document types. Its name has been changed from "eReferrals" to "eReferral".

This end product has a dependency on: NEHTA-1446:2013 *Clinical Documents - Common Conformance Profile v1.4* (part of EP-1457:2013 Common – Clinical Document v1.1).

## Package inclusions

### New

None

**Updated (supersedes previous version)**

| Identifier | Name | Version |
|---|---|---|
| NEHTA-1440:2013 | *eReferral - Release Note* | 1.4 |
| NEHTA-1449:2013 | *eReferral - Conformance Profile* | 1.4 |

**No change**

| Identifier | Name | Version |
|---|---|---|
| NEHTA-0968:2011 | *eReferral - Core Information Components* | 1.1.3 |
| NEHTA-0969:2012 | *eReferral - P2P Delivery Technical Service Specification* | 1.3 |
| NEHTA-0967:2012 | *eReferral - CDA Implementation Guide* | 2.2 |
| NEHTA-0971:2011 | *eReferral - Structured Content Specification* | 2.1 |
| NEHTA-1155:2011 | *eReferral - Business Requirements Specification* | 1.1 |
| NEHTA-0571:2009 | *eReferral - Environmental Scan - Overview* | 1.0 |
| NEHTA-1272:2013 | *eReferral - FAQ eReferral Resolution Flag* | 1.1 |
| NEHTA-1067:2011 | *eReferral - FAQ Vendor advice regarding eReferral questions* | 1.2 |

**Removed**

None

## Scope

The scope of the eReferral end product has not been changed as part of this release.

## Stakeholders

The following stakeholders have been involved in the development of this release:

- DoHA
- Accenture
- CCA Governance Group

## Audience

- Implementers of clinical systems producing or consuming eReferral clinical documents
- Senior managers and policy makers, clinical experts, health information managers, IT operations and support teams, and system integrators
- Technical and non-technical readers

## Capabilities

The following sections provide additional details for each of the change requests addressed in this release.

### CCB-0116

The change request introduces the temporary and limited relaxation of the mandatory requirement to include HPI-Is for a number of clinical document types, including eReferral documents. It also introduces additional conformance requirements for local identifiers that need to be included in an eReferral document wherever an HPI-I has been omitted.

**CCB-0222**

The change request introduces support for digital signatures created with CSP digital certificates for all types of clinical documents. New conformance requirements have been added in the *Clinical Documents - Common Conformance Profile v1.4*.

These new conformance requirements expand on and replace the conformance requirement for digital signatures in the *eReferral - PCEHR Conformance Profile v1.3*. With version 1.4 of the *eReferral - PCEHR Conformance Profile,* this conformance requirement has been removed.

## Known issues

None known

# EP-0936:2012 eReferrals v1.3

Release note: NEHTA-0972:2012, May 2012

## Version update

It has been identified that the formatting of the Conformance Profile document associated with this re-release was corrupted during its conversion to a PDF. An updated version of the Conformance Profile document is being released to address this issue. Note the update version of this document contains no material changes.

## Background to this release

This is a re-release of the eReferrals Solution Bundle, which was originally published on 9 December 2011. Issues were identified with the CDA Implementation Guide associated with this release, as well as inconsistencies between Solution Bundles, where there were technical inconsistencies in the Guides that may have caused confusion for implementers. Therefore NEHTA decided to withdraw the bundle components (CDA Implementation Guide and Sample Code) released in December, rectify them, and re-release the amended Solution Bundle. In addition to the re-released CDA Implementation Guides, NEHTA is also releasing additional products, as listed below, designed to assist vendors to test messages generated from their software. The additional product components are provided to promote greater clarity for vendors through the implementation process

## Release rationale

This release bundle has been updated to support the eReferrals availability via the PCEHR. The Solution Bundle includes updates to the CDA Implementation Guide as informed by several NEHTA teams (Implementation; Compliance, Conformance and Accreditation; Reference Platform; and Clinical Terminology and Information). Other products have been updated as a result of the CDA Implementation Guide re-release including Point to Point Logical Service Specification and Technical Service Specification. Additional product components in this release include Schematron Libraries, CDA Library, CDA Validator and Clinical Document Test Data to assist vendors to test message capability and conformance..

## Scope

The aim of these eReferral specifications is to provide the requirements for the generation, distribution and receipt of a Referral between general practitioners and specialists. The information may be used by the nominated primary provider to update their local record and the PCEHR.

The PCEHR Concept of Operations states that the PCEHR System will support collection of Referrals. When a healthcare provider creates a referral, it will be sent directly to the intended recipient, as per current practices, and a copy of the Referral may also be sent to the PCEHR System.

## Stakeholders

The following stakeholders have been involved in the development and testing of this release:

- Continuity of Care Reference Group (NEHTA stakeholders)
- Clinical Terminology and Information (NEHTA)
- Compliance, Conformance and Accreditation (NEHTA)
- Reference Platform (NEHTA)

- Implementations (NEHTA)
- Vendors participating in Lead eHealth Implementation sites

## Audience

The intended audience of this document includes:

- Early adopter hospital networks, lead eHealth Implementation sites and jurisdictional health departments in the process of planning, implementing or upgrading discharge summary systems
- Software vendors developing discharge summary system products
- Early adopter GP desktop software vendors
- Senior managers and policy makers, clinical experts, health information managers, IT operations and support teams, and system integrators
- Technical and non-technical readers.

## Additions

The following new products are associated with this Solution Bundle release to assist vendors to build and test the new messaging capability:

- eReferrals Schematron Libraries
- eReferrals Clinical Document Test Data
- eReferral CDA Library – Sample Code
- CDA Validator
- CDA Rendering Specification

These additional products (except for CDA Rendering Specification) are initially available as a limited release to enable a small group to test them before being generally available to the broader vendor community. For further details on access to this limited release please send an email to nehtasupport@nehta.gov.au.

## Changes

Refer to the "Change Log" located at the back of each specification. This itemises all changes between specification versions.

## Removals

None.

## Support

For further support or to provide feedback, please email the NEHTA Service Desk at nehtasupport@nehta.gov.au or phone on 1300 901 001.

## Future releases

These specifications will soon be implemented in a clinical setting. While NEHTA has consulted extensively with clinical, consumer, government and vendor stakeholders on the specifications over past years, implementation will provide new feedback on the use and suitability of the specifications within a clinical workflow. NEHTA has established feedback mechanisms from known implementations in Lead eHealth Implementation sites. NEHTA requests any other implementers involved in using software built to the specifications in a clinical setting to contact the NEHTA Service Desk.

Updated versions of specifications will be scheduled for release (post – July 2012 and tied into the release of the Standards Australia publications where this is applicable) and may be required to address additional lessons learnt through implementations, to provide new features or enhancements and respond to advice from the vendor and standards community engagement.

Any changes to planned release cycles will comply with criteria for specification release as set out in the NEHTA Specifications and Standards Plan, as agreed with industry stakeholders and published in 2011.

## Solution Bundle Content

### Logical Service and Structured Content Specification

| Title | Status |
|---|---|
| Core Information Components v1.1.3 | (unchanged) |
| Structured Content Specification v2.1 | (unchanged) |
| P2P Logical Services Specification (LSS) Document Delivery v1.1<br>○ (Common endpoint interface specification for point to point connection. Located in "Common Specifications Folder".) | (replaces v1.0) |

### Technical Services Specification

| Title | Status |
|---|---|
| eReferrals CDA Implementation Guide v2.2 | (replaces v2.1) |
| eReferrals P2P Technical Service Specification v1.3 | (replaces v1.2) |
| CDA Rendering Specification v1.0<br>○ (Common message rendering specification. Located in "Common Specifications Folder".) | (new product) |
| P2P Technical Services Specification (TSS) Document Delivery v1.1<br>○ (Common endpoint interface specification for point to point connection. Located in "Common Specifications Folder".) | (replaces v1.0) |
| Clinical Package v1.0<br>○ (This specification defines a clinical package as a logical model of the data it contains. This model can be profiled to create data models for specific clinical data. Located in "Common Specifications Folder".) | (unchanged) |
| CDA Package v1.0<br>○ (Common logical model for bundling of clinical documents with referenced attachments. Located in "Common Specifications Folder".) | (unchanged) |

### eHealth Conformance profile

| Title | Status |
|---|---|
| eReferrals Conformance Profile for Clinical Documents v1.3 | (replaces v1.2) |

| Title | Status |
|---|---|
| Conformance Profile for Clinical Documents – Common v1.3<br>○ (Located in "Common Specifications Folder".) | (replaces v1.2) |

## Clarifications

Refers to *eReferrals CDA Implementation Guide v2.2*

## Clinical

### Medical History

A number of NEHTA clinical content specifications (Structured Content Specifications – SCS) contain an information component known as Medical History (also known as "Current and Past Medical History").

NEHTA specifications on eReferral, Specialist Letter and Shared Health Summary contain an information component known as *Medical History* (also known as "Current and Past Medical History"). Clinically speaking, Medical History in the Discharge Summary is represented by Primary Problem/Diagnosis, Co-Morbidity and Clinical Interventions.

### Structuring Medical History Clinical Information Model

The Medical History information structure contains two distinct categories:

- *Problem/Diagnosis* and *Procedure* to meet information capturing and persistence requirements of acute care/hospital sector; or
- Uncategorised *Other Medical History Item* to meet information capturing and viewing requirements of primary care/general practice sector.

The design intent is for software vendors to design for the first two data categories:

- *Problem/Diagnosis* and
- *Procedure*

The constraint for use is to use EITHER *"Problem/Diagnosis"* and *"Procedure"* OR *"Other Medical History Item"*, but NOT both.

These categorisations are technical design decisions and do not impose any rendering constraints on the clinical desktop applications used by healthcare providers. These items can be rendered using screen names in accordance to the preferences of individual healthcare providers or the healthcare sector.

It is also acknowledged that the technical name "Other Medical History Item" can be misinterpreted during technical implementation as relatively unimportant medical history items. For clinical safety reasons, it was decided that this technical name will be changed to "uncategorised medical history" and include a clear definition and description of this item in the next release.

### Processing of Medical History Data by Local Clinical Systems

The different *Medical History* information structures may create information reconciliation challenges for importing clinical systems when attempting to extract and load medical history information from the Discharge Summary or Shared Health Summary, etc. into local databases with different information structures. Uncategorised Medical History items, if encoded in

SNOMED CT[4] codes, can be algorithmically analysed, categorised using the SNOMED CT codes and stored as Problem/Diagnosis or Procedure items accordingly. Unencoded items will require manual processing before they can be incorporated into local databases.

For clinical safety reasons, linkage must be maintained between extracted data that are stored in local databases and the source *Medical History* data from the downloaded CDA document which should also be persisted in its entirety.

Please note that duplicate medical history entries may result if uncategorised Medical History data are extracted and incorporated into local system databases without undergoing algorithmic or manual reconciliation processes.

## Technical

### "NullFlavour Attributes"

It has been brought to NEHTA's attention that, for certain items with cardinality [1..n], the CDA Implementation Guides are unclear regarding whether a "NullFlavour" attribute may be used in place of providing proper data. A clarifying release note will be published in April 2012 following consultation with stakeholders, providing this information for each affected item and schematrons will be updated accordingly.

### Representing fully structured addresses

The Structured Content Specifications use the address model defined in the participation specification and that is based on the address models defined in AS 5017 and 4846. These divide a real world address into a highly structured address that is consistent with the official Australia Post database (called the PAF). AS 5017 has 17 fields for address. Most implementations (in and outside health) do not collect this many fields. The norm is between 1-3 lines of text, followed by suburb, state, postcode, and country, though systems vary wildly. The HI Service address type uses a full AS 5017 structure.

Because of this, the NEHTA address model for Australian addresses (as defined in the Participation Specification) has the following fields:

- Unstructured Address Line [0..*]
- STRUCTURED ADDRESS LINE [0..1]
- Suburb/Town/Locality [0..1]
- State/Territory [0..1]
- Postcode [0..1]
- Delivery Point Identifier [0..1].

And the Structured Address line in turn has the following elements:

- Unit Type
- Unit Number
- Address Site Name
- Level Type
- Level Number
- Street Number
- Lot Number

[4] IHTSDO®, SNOMED® and SNOMED CT® are registered trademarks of the International Health Terminology Standards Development Organisation.

- Street Name
- Street Type
- Street Suffix
- Postal Delivery Type
- Postal Delivery Number.

All have cardinality [0..1]. For definitions of these, consult AS 5017.

So an address can either contain multiple unstructured lines, or can populate the structured fields. If both are populated, they should agree.

Issues will be encountered when any of the address types in either HL7 v2 or CDA are used. For CDA, the address type is AD from the v3 data types R1. This doesn't have the same finely granulated fields as AS 5017, and as a consequence, the mapping cannot be a round trip 1:1 mapping. Therefore, an address fully structured as above cannot be (per AS 5017) represented in the CDA document, and still be able to identify the parts. This table summarises the mappings:

| **Field Name** | **Address Element Name** |
|---|---|
| Unstructured Address Line | StreetAddressLine |
| STRUCTURED ADDRESS LINE: | |
| Unit Type | unitType |
| Unit Number | unitID |
| Address Site Name | additionalLocator |
| Level Type | additionalLocator |
| Level Number | additionalLocator |
| Street Number | houseNumber |
| Lot Number | additionalLocator |
| Street Name | streetName |
| Street Type | streetNameType |
| Street Suffix | direction |
| Postal Delivery Type | deliveryAddressLine |
| Postal Delivery Number | deliveryAddressLine |
| Suburb/Town/Locality | city |
| State/Territory | state |
| Postcode | postalCode |
| Delivery Point Identifier | additionalLocator |

As a consequence of this, in the CDA document, it is not possible to distinguish the difference between Address Site Name, Level Type, Level Number, Lot Number, and the Delivery Point Identifier, and between Postal Delivery Type and Postal Delivery Number. In practice, most systems use the simple address model, and will be unaffected by this. Systems that use a fully specified address per AS 5017, or that endeavour to match addresses against the PAF will

need to continue to use special matching algorithms/software to overcome the CDA limitations here (as would already be required to overcome v2 limitations).

Any system that populates the structured address should also populate one or more unstructured address lines too.

### Representing MRNs and other identifiers

This specification provides a code element on ex:asEntityIdentifier that may be used to indicate the type of an identifier for non-national identifiers such as IHI, HPI-I, HPI-O. However in this version, the specification does not specify a value set that should be used in the code element. This will be addressed in a future version. The HL7 v2 table 0203 is a candidate for interim use (see http://www.healthintersections.com.au/?p=721 for examples).

### Mapping error in imaging examination report/result group/anatomical location

The mapping for "Anatomical Location" in "Imaging Examination Result Group" is incorrect – it is attached to the individual results rather than the group of results by virtue of the context: `entryRelationship[im_res_gp]/organizer/component[ind_im_res]/observation/targetSiteCode` (should not use ind_im_res in the context). This will be fixed in future versions of the specification, and this mapping should not be used. Please consult NEHTA if the use of this data element is required.

### SNOMED CT-AU version issues

This specification uses some SNOMED CT-AU codes for identifying sections and entries, and identifies these as being taken from a particular SNOMED CT-AU release. Future specifications

will clarify whether implementations are required to identify this particular version or any other in the CDA documents. In addition, the specification may contain example fragments using older releases of either SNOMED CT or SNOMED CT-AU. These older versions of SNOMED CT and SNOMED CT-AU should not be in use in Australia: these examples will be fixed in a future release. The syntax of the codeSystemVersion attributes may be affected by ongoing IHTSDO deliberations about how to represent SNOMED CT versions.

### Representation of Diagnostic Reports

The new industry practice, which aligns with IT-14 standards currently in preparation, is to send multiple different formats for diagnostic service reports (e.g. PDF, RTF, XHTML). Each report contains the same content, but the renderer can choose the format that they are best able to support when showing the content (depending on platform and tools available). This is what is intended when the definition of the Test Result Representation includes the remark:

> "Multiple formats are allowed but they must be semantically equivalent".

The cardinality of the Test result Representation is [0..1] in this specification, and therefore precludes sending multiple formats. This issue will be addressed in a future release. The same issue applies to the Examination Report Representation, though its definition does not include a "multiple formats" note.

### Conformance Criteria

The Common Conformance Profile for Clinical Documents defines five levels of conformance for clinical documents. These are levels 1A, 1B, 2, 3A and 3B, where 3B is the highest. A minimum level of conformance applies to clinical documents sent to the PCEHR System. The minimum level for a specific type of clinical document is specified in the associated PCEHR Conformance Profile. Documents sent to the PCEHR System that do not meet the minimum level of conformance will be automatically rejected. For most document types the minimum level of

conformance is 1A but for some document types the minimum conformance level is 3A. NEHTA welcomes feedback about the minimum level of conformance from early adopters of the PCEHR System. There is an opportunity to adjust the minimum conformance level based on this feedback.

## Release history

| Version | Date | Comment |
|---|---|---|
| eReferrals v1.3 | March 2012 | Update |
| eReferrals v1.2 | December 2011 | Withdrawn |
| eReferrals v1.1 | November 2011 | Update |
| eReferrals v1.0 | November 2009 | Initial Release |

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**Contact for enquiries**
Telephone: 1300 901 001 or email: help@nehta.gov.au



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