



## eDischarge Summary version 1.3

21st March 2012

### Summary

#### 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 eDischarge Summary Solution Bundle, which was originally published on 2 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 eDischarge Summary 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

These eDischarge Summary specifications include requirements for the generation, distribution and receipt of discharge summaries for admitted patients, primarily from hospitals to general practitioners, but allowing the same content to be sent to other relevant recipients. 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 Discharge Summaries. When a healthcare provider creates a Discharge Summary, it will be sent directly to the intended recipient, as per current practices, and a copy of the Discharge Summary may also be sent to the PCEHR System.

**Release history**

Version	Date	Comment
eDischarge Summary Release 1.0	14 <sup>th</sup> August 2009	Initial Release
eDischarge Summary 1.1	8 <sup>th</sup> October 2010	Update
eDischarge Summary 1.2	2 <sup>nd</sup> December 2011	PCEHR Release

**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
- Standards Australia

**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:

- eDischarge Summary Schematron Libraries
- eDischarge Summary Clinical Document Test Data
- eDischarge Summary 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](mailto: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](mailto: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

<b>Logical Service and Structured Content Specification</b>	
Core Information Components v1.1.2	(unchanged)
Structured Document Template v3.3	(unchanged)
P2P Logical Service Specification v1.1 (Common logical interface specification for point to point connection. Located in "Common Specifications Folder".)	(replaces v1.0)
<b>Technical Services Specification</b>	
eDischarge Summary CDA Implementation Guide v3.4	(replaces v3.3)
eDischarge Summary P2P Technical Service Specification v1.3	(replaces v1.2)
CDA Rendering Specification v1.0 (Common message rendering specification. Located in "Common Specifications Folder".)	(new product)
P2P Technical Services Specification (TSS) Document Delivery v1.1 (Common endpoint interface specification for point to point connection. Located in "Common Specifications Folder".)	(replaces v1.0)
Clinical Package v1.0 (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 (Common logical model for bundling of clinical documents with referenced attachments. Located in "Common Specifications Folder".)	(unchanged)
<b>eHealth Conformance profile</b>	
eDischarge Summary Conformance Profile for Clinical Documents -v1.2	(replaces v1.1)
Conformance Profile for Clinical Documents – Common v1.2 (Located in "Common Specifications Folder".)	(replaces v1.1)

## Clarifications

(Refers to eDischarge Summary CDA Implementation Guide v3.4)

### Clinical

Nil.

### 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
- 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 <sup>1</sup> 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.

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