

eHealth Integration Sample Code v6.0 Release Note

31 May 2016

Approved for external information

End product identifier: EP-2258:2016

Release rationale

Version 6.0 of the eHealth Integration Sample Code (eHISC) enables the upload of pathology and diagnostic imaging reports to the My Health Record system without the need to generate CDA™¹ documents.

This eHISC release introduces the ability to upload HL7™ v2 pathology and diagnostic imaging reports to the My Health Record system as CDA documents. eHISC automatically converts HL7 v2 ORU messages into eHealth Pathology Report and eHealth Diagnostic Imaging Report CDA documents and facilitates their upload to the My Health Record system.

The conversion capability supports ORU messages containing a PDF version of the diagnostic report. The resulting CDA documents do not contain any structured report information but instead refer to the PDF report that was extracted from the ORU message and attached to the CDA document.

eHISC accepts ORU messages via both its SOAP web service interface and its new low-level MLLP interface. MLLP offers an easy-to-use integration path, as it is already widely supported by existing laboratory and radiology information system implementations.

Product components

New

Identifier	Name
NEHTA-2343:2016	<i>eHISC - Binary Software Package v6.0</i>
NEHTA-2342:2016	<i>eHISC - Source Code Software Package v6.0</i>

Updated (supersedes previous version)

Identifier	Name
NEHTA-2264:2016	<i>eHISC - Product Data Sheet v6.0</i>
NEHTA-2263:2016	<i>eHISC - Release Note v6.0 (this document)</i>

¹ HL7 and CDA are trademarks of Health Level Seven International and are registered with the United States Patent and Trademark Office.

Archived

Identifier	Name
NEHTA-2186:2016	<i>eHealth Integration Sample Code - Core Software Package v2.0.3</i>
NEHTA-2187:2016	<i>eHealth Integration Sample Code - UI Software Package v2.0.3</i>

Audience

- Diagnostic service provider organisations
- Healthcare provider organisations
- System integrators
- Software vendors

Assurance

eHISC v6.0 has undergone the following conformance assessments:

- Healthcare Identifiers (HI) service:
 - Notice of Connection (NOC);
 - CCA assessment by NATA-accredited external test laboratory;
- My Health Record system:
 - Notice of Connection (NOC);
 - Execution of all conformance test cases applicable to the functionality of eHISC.

Due to the sample code nature of eHISC v6.0, implementers will have to undergo their own set of conformance assessments. This particularly applies to those conformance requirements for the My Health Record system that relate to functionality and processes outside the scope of eHISC v6.0.

Documentation of conformance assessments performed for eHISC v6.0 is available from the NEHTA Help Centre at help@nehta.gov.au or by phoning 1300 901 001.

Known issues

The following issues have been identified with this version of eHISC and are scheduled to be addressed in the next eHISC release.

Issue	Document Type	Impact
Medicare number or DVA required when IHI	All	Documents containing an IHI number but not a Medicare or DVA number are rejected by eHISC. The documents are <i>not</i> uploaded to the My Health Record system.
NullFlavor support for unknown requesting organisation	Pathology Report Diagnostic Imaging Report	When a requester organisation is unknown, the organisation name is stated as "NI" in the CDA document, when it should be stated as an "NI" nullFlavor. When the document is rendered, the requester organisation name will be displayed to users as "NI". The documents are uploaded to the My Health Record system.

Issue	Document Type	Impact
NullFlavor support for unknown anatomical location	Diagnostic Imaging Report	<p>When the anatomical location for a result is unknown, the location is represented as "UNK" in the CDA document, when it should be stated as an "NI" nullFlavor. When the document is rendered, the location will be displayed to users as "UNK".</p> <p>The documents are uploaded to the My Health Record system.</p> <p>This applies to all diagnostic imaging documents generated from ORU messages.</p>
NullFlavor support for no or multiple document authors	Pathology Report Diagnostic Imaging Report	<p>When a diagnostic report has more than author, the author's family name is represented as "NI" in the CDA document, when it should be stated as an "NI" nullFlavor. When the document is rendered, the name of the document author is displayed to users as "NI".</p> <p>The documents are uploaded to the My Health Record system.</p>
Narrative support for multiple reporting pathologists	Pathology Report	<p>Names of reporting pathologists are not listed in the narrative of the CDA document. They will not be displayed to users when the document is rendered.</p> <p>The documents are uploaded to the My Health Record system.</p>

Implementers of eHISC v6.0 are required to address these issues as a prerequisite of their conformance declaration.

Licence

The eHISC Binary Software is licensed under the eHISC Binary Software - Software Licence Terms and Conditions (included in the eHISC Binary Software Package).

The eHISC Source Code is licensed under the Source Code Licence and Production Disclaimer (included in the eHISC Source Code Software Package).

Support

The eHISC product represents sample code that implementers are free to modify, customise and integrate with their own software implementations. For this reason, NEHTA's ability to provide technical support is limited. Third-party technical support is available from commercial partner organisations. Implementers are encouraged to take out support contracts with suitable support providers to ensure the successful implementation and operation of eHISC.

For further information about the product or to provide feedback, please email the NEHTA Help Centre at help@nehta.gov.au or phone 1300 901 001. Your views on the scope and usability of eHISC will inform future releases.

Future releases

eHISC will be released on an ad-hoc basis, based on providing new functionality, or other changes as required.

Previous releases

Date	Version
02-02-2016	EP-2199:2016 eHealth Integration Sample Code (eHISC) v2.0.3 Release note
Release rationale: The enhancements made to eHISC v2.0.3 are listed below.	
Change description	Notes
PCEHR NOC compliance	eHISC 2.0.3 includes changes made to the system for PCEHR NOC compliance.
PCEHR CCA compliance	Changes made to the system for PCEHR CCA compliance: Removal of DVA number from Level 1A Discharge Summary, change to Mode of Separation display names.
HI CCA compliance	Changes made to the system for Healthcare Identifier CCA compliance: Duplicate IHI alerting. Non-active HPI-I warning.
PCEHR View	Handle the error if a patient has more than 1000 documents of their PCEHR.
PCEHR Advertised improvements	Add a new method IsPcehrAdvertisedLocal to lookup a patient's PCEHR status in the local data without connecting to the PCEHR. This was requested due to the UI making a large number of calls to the PCEHR.
NEHTA CDA® Generator Library	Updated the NEHTA CDA Generator Library to only generate a single section in the CDA document when creating a Discharge Summary 1A document.
Patient Summary	Added a date range selector to allow the user to reduce the number of documents retrieved from the PCEHR. This is to work around the 1000 document limitation on the PCEHR.
NEHTA Stylesheets	Update the NEHTA Stylesheets to version 1.2.9
Assisted Registration	Improved error information displayed to the user so they have a greater opportunity to resolve the issue and register the patient.
Logout	A new configuration setting has been added allowing the Logout button to be removed for implementations that do not want users to be able to logout.
eHISC UI user security improvements	As part of the test deployment of eHISC 2.0.3, issues were found with the integration with some Active Directory installations involving multiple domains with one-way trusts. The Active Directory integration has been updated to make it more flexible.
Demographic mismatch status	An issue was found that prevented the demographic mismatch alert status from being saved into the IHI record after a Medicare or DVA number change.
Prescription and Dispense View	Fixed a bug the prevented users from seeing a patient's Prescription and Dispense View if the patient had no other documents loaded to the PCEHR.
Gain Access	Fixed a bug where Gain Access would fail for patients without a current episode.
Withdraw Consent	Fixed a bug that prevented withdraw of consent to all of a patient's episodes if any of them had a document already uploaded.

27-02-2015 [EP-2036:2015 eHealth Integration Sample Code \(eHISC\) v2.0](#)

[Release note](#)

Release rationale: eHISC v2.0 had multiple enhancements, as listed below.

Change description	Notes
Patients Without IHI in Web UI	New web service operations and Web UI enhancements to allow viewing and printing a list of admitted patients whose IHI was not found.
Withdrawal of Consent in Web UI	New web service operations and Web UI enhancements to allow listing and searching for patients and recording their withdrawal of consent to upload documents to the PCEHR system on an episode-by-episode basis.
Disclosure of Hidden PCEHR in Web UI	New web service operations and Web UI enhancements to allow listing and searching for patients and recording their disclosure of the existence of a hidden PCEHR record.
Removing Documents from PCEHR in Web UI	New web service operations and Web UI enhancements to allow listing and searching for patients, viewing uploaded documents and removing uploaded documents from the PCEHR system.
Patient Landing Page in Web UI	Web UI enhancements to support embedding the eHISC PCEHR Web Viewer into existing clinical applications.
Upload Level 1A Discharge Summary in Web Services	New web service operation to allow clinical systems to supply a discharge summary in PDF format along with minimal required metadata, to create a Level 1A CDA document with the PDF as the non-CDA body item, and upload this package to the PCEHR system.
Registered Date of Birth	Enhancement to the IHI processing where, when enabled, eHISC will store the date of birth used in a successful IHI search along with the other patient demographics.
Enterprise ID	Enhancement to the patient identifiers to allow a new type of identifier called Registered Enterprise Patient. This identifier holds the same information as the current State Patient Identifier but will create a Hospital Patient record if one does not currently exist for the patient.
Upload Pathology Report and Diagnostic Imaging Report	This release includes support for uploading Pathology Report and Diagnostic Imaging Report documents to the PCEHR system.
CSP and Multitenant	<p>The Multi-Tenant and CSP project has extended the eHISC-Core product to support the use of eHISC in an environment where a Contracted Service Provider (CSP) operates HIPS on behalf of several Healthcare Provider Organisations (HPO) that may not be permitted to share Healthcare Identifiers.</p> <ul style="list-style-type: none"> • Multi-Tenant for IHI ensures that each HPO must obtain a patient's IHI from the HI Service separately, and cannot use the cached value that is stored by another HPO. • CSP for HI Service allows a CSP that operates HIPS to connect to the HI Service for IHI and HPI-I lookups using a Medicare certificate issued to the CSP, instead of connecting with the Medicare certificate issued to each HPO. • CSP for PCEHR allows a CSP that operates HIPS to connect to the PCEHR system using a "NASH PKI Certificate for Supporting

Date	Version
	<p>Organisations" issued to the CSP, instead of connecting with the "NASH PKI Certificate for Health Provider Organisations" issued to each HPO.</p> <p>Note: a CSP that does not have access to the NASH certificate for each HPO will not be able to upload documents to the PCEHR, because the HPO certificate is required for CDA packaging. Viewing the PCEHR is still possible in this scenario.</p>
	<p>SQL Server 2012 Compatibility and High Availability Disaster Recovery through SQL Always On</p> <p>Modifications of all databases in the solution to upgrade all SQL scripts to ensure compatibility with Microsoft SQL Server 2012, whilst ensuring that all SQL scripts are still backward compatible with SQL Server 2008 R2. Ensuring that the eHISC server database solution is able to be implemented and supported in a Microsoft SQL Server 2012 Always On Cluster.</p>
	<p>Document Upload HPIO Validation</p> <p>eHISC 1.0 added extra validation of a CDA document before uploading it. One of these steps was in error as the custodian does not need to have the same HPI-O as the uploading organisation, but the validation required it to be the same HPI-O.</p> <p>In lieu of validating the HPI-O directly with the HI Service, the resolution applied in this release is to allow the custodian HPI-O to be any of the HPI-O numbers registered within the same eHISC instance, as the validity of these numbers is checked by the eHISC system administrator during configuration.</p>
	<p>HealthProviderOrganisationPatient Advertised Status Update Fix</p> <p>A fix was applied for updates to the HealthProviderOrganisationPatient table to only update the PCEHR advertised or PCEHR disclosure status for a specific HPI-O against a specific Patient Master. In the previous version of eHISC all records for a singular, specific Patient Master in the HealthProviderOrganisationPatient table were updated regardless of the HPI-O being specified. This was restricted to records that were already existing in the HealthProviderOrganisationPatient table, which can be added via a positive check for a PCEHR status or a PCEHR disclosure, where the patient had flipped their PCEHR status to hidden in a hospital after previously having the PCEHR visible and then declaring the PCEHR at a subsequent visit.</p>
15-04-2014	<p>EP-1685:2014 eHealth Integration Sample Code (eHISC) v1.0 Release note</p> <p>Release rationale:</p> <p>The eHealth Integration Sample Code comprises the source code and associated documentation for the Healthcare Identifier and PCEHR System (HIPS) software, developed by a third party vendor on behalf of a number of states and territories.</p>

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