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Australian Government
Australian Digital Health Agency

HIPS
Release Note

14 April 2020 v7.3
Approved for external information
Document ID: DH-2983:2020

Related end product identifier: EP-2977:2020

Release rationale

HIPS v7.3 is a minor release that provides the following important functionality improvements:

- Goals of Care document type introduced for upload and display
- Advance Care Planning document type now also supported for upload
- User interface enhancements:
  - Improved Advance Care Information indicator on Patient Summary screen, covering:
    - Goals of Care documents
    - Advance Care Planning documents
    - Advance Care Directive Custodian Record documents
  - New Advance Care Information screen focussed on:
    - Goals of Care documents
    - Advance Care Planning documents
    - Advance Care Directive Custodian Record documents
- Enhancements for HL7 ADT and ORU messages:
  - Enhanced validation of HL7 message fields
  - Improved processing of edge cases
  - Alignment to HL7 standard for representation and interpretation of null values

For a comprehensive list of changes, please refer to the Change details section below.

Package inclusions

Updated (supersedes previous version)

DH-2980:2020	*HIPS – Binary Software Package v7.3*
DH-2981:2020	*HIPS – Documentation Package v7.3*
DH-2978:2020	*HIPS – Functional Change Log v7.3*
DH-2979:2020	*HIPS – Interface Change Log v7.3*
DH-2982:2020	*HIPS – Product Data Sheet v7.3*
DH-2983:2020	*HIPS – Release Note v7.3* (this document)

Removed

DH-2970:2019	*HIPS – Module Guide (UI) v7.2.1* (now included in documentation package)

Change details

The following items are addressed by this release.

ADO ID	Summary	Change description
556	Address handling of errors in AR causing additional errors in ELMAH logs.	HIPS UI has been modified to prevent the ASP.NET framework from attempting to handle error page redirection. This change will prevent meaningless error messages being logged in the hips.ELMAH_Error table. HIPS UI has custom error handling and has no need for default ASP.NET error handling.
5354	The HealthProviderIndividualHpii table doesn't have foreign key relationships	Three foreign key constraints have been added to the HealthProviderIndividualHpii table to ensure referential integrity of data. The following columns of the HealthProviderIndividualHpii table now explicitly reference the appropriate column in related tables: • HealthProviderIndividualId > HealthProviderIndividual.HealthProviderIndividualId • HealthProviderOrganisationNetworkId > HealthProviderOrganisationNetwork.HealthProviderOrganisationNetworkId • HpiiStatus.HpiiStatusId > HpiiStatusId
6627	DbUpgrade: Ensure DbUpgrade creates & uses SchemaVersions table in dbo schema	In some circumstances the [SchemaVersions] table used by the DbUpgrade utility to track scripts applied during database upgrades is incorrectly created in the [hips] database schema instead of the [dbo] schema; this change not only prevents this from occurring in the future, but also detects and corrects this where necessary.

ADO ID	Summary	Change description
7307	HIPS-UI: Provide capability for administrative user to reset IHI assigned to patient	HIPS UI has been modified to allow a user to resolve Demographic Mismatch, Medicare/DVA Change Mismatch, Address Change Mismatch or Merge Conflict alerts by resetting the IHI assigned to a local patient record. Selecting the 'Reset IHI' button will show a page displaying the patient's details. Additional details are shown if any documents have been uploaded to the My Health Record for the IHI being reset. Once confirmation is given, HIPS will move any episodes with uploaded documents to another record with the same IHI, remove the assigned IHI, and attempt a new IHI lookup using the current demographics. For further details see the Module Guide (UI).
7765	Validation of remaining fields in HL7 ORU messages	HL7 ORU_R01 messages submitted to HIPS Core via the IPathologyImagingService and IPathologyImagingServiceV2 interfaces are now subjected to additional validation measures: • Many validations that were previously applied after de-queueing the request are now applied before adding the request to the queue so that any failure may be notified immediately via the SOAP response. • Additional validations have been created and existing validations have been updated to give more informative messages regarding the field in error. • Additional validations have been created to avoid failures previously encountered in the Agency vendor libraries or during submission to the My Health Record service. • Additional validations have been created to avoid null object references errors. • All validation failures are now notified via an InvalidRequestFault rather than via a ServiceOperationFault.
8045	Document removal table is not retaining the sorted column value after the document removal	HIPS UI will now maintain the sorting order and sorting direction in the Remove Document page after the user has removed or viewed a document.
8211	Allow Path and DI messages using MRN without Medicare and DVA	HIPS will now allow HL7 ORU uploads with an empty Medicare number and DVA number. This will allow sites to send uploads for existing HIPS patients from systems that do not know about these identifiers.

ADO ID	Summary	Change description
8255	Align HL7 processing with the standard for use of nulls	A new configuration called EnableHL7NullHandling has been added to HIPS Core to allow sites to decide if they want to adopt the new HL7 messages behaviour. Previously HIPS treated the omission of some key fields as a deliberate null and would remove any existing data stored in the database. When EnableHL7NullHandling is enabled HIPS will no longer replace information stored for the patient unless new information is provided or a deliberate null is provided by specifying empty quotes in the HL7 field value. The default value for EnableHL7NullHandling is set to 'true' and sites will need to modify the value to 'false' manually if they wish to use the old HL7 Message behaviour.
8619	Validation of fields in ADT messages	HL7 v2 messages submitted to HIPS Core via the DatabaseLoaderService and IPathologyImagingService(+V2) interfaces are now subjected to additional validation measures. These can be grouped into the following categories. • HL7 v2 parsing failures– greater validation of the MSH segment is performed. • Messages containing HTML are now rejected. Note: this has the potential to cause rejection of messages that may previously have been accepted. It is advisable to analyse the existing message set for impacts, update transformations in your integration engine to strip HTML from the message if necessary and perform testing before deployment to production. • Field lengths – the length of data is checked before storing in database. Note: checking the length of fields in the message has the potential to cause rejection of messages that may previously have been accepted but had their data silently truncated in the database. It is advisable to analyse the existing message set for impacts and perform testing before deployment to production. The following additional validation categories specifically apply to ADT messages: • Message types – messages with unhandled trigger events are now discarded and an error logged. • Missing segment detection – messages missing mandatory segments are rejected. • Patient identifiers – where MRN has no assigning authority HIPS reports a more informative message. • Invalid dates – reported with more informative messages. • Episodes – not created where no visit number present. • Merge – messages missing mandatory data are rejected.

ADO ID	Summary	Change description
9032	Stack trace appears in ExceptionMessage column when LogStackTrace config is false - Documentation issue	HIPS documentation has been corrected such that it no longer refers to a legacy configuration setting that is no longer in use.
9197	Arbitrary File Inclusion	HIPS Core has been modified to include appropriate validation when providing path locations in requests submitted via the PathologyImagingService and PathologyImagingServiceV2 services. This validation mitigates "file inclusion" and "pass the hash" attacks.
9198	Persistent XSS via HL7 messages (ADT)	As part of a related task (see 8619 - Validation of fields in ADT Message) a vulnerability that allowed HL7 messages containing HTML and JavaScript to be processed and stored in the database has now been prevented and these messages are now rejected. Note: this has the potential to cause rejection of messages that may previously have been accepted. It is advisable to analyse the existing message set for impacts, update transformations in your integration engine to strip HTML from the message if necessary and perform testing before deployment to production.
9207	Uncontrolled Resource Consumption	HL7 acknowledgement messages sent via HIPS are now restricted to a maximum size of 128KB. This change has been made to mitigate an "Uncontrolled Resource Consumption" vulnerability that was detected on the AckService SendAck operation.
9237	Upload of Advance Care Planning and Goals of Care documents	HIPS Core now supports the upload of Advance Care Planning and Goals of Care CDA documents via the UploadOrSupersedeDocument web service operation. Sites intending to upload these documents must comply with additional conformance requirements on the producing system for these document types, including specific help text to be displayed in the user interface. HIPS is not responsible for implementing the user interface or CDA document production for these document types. See the My Health Record Conformance Profiles for Advance Care Planning and Goals of Care for a complete set of requirements. Regarding requirement 23513 (ACP and GOC), to ensure HIPS uploads each document to the My Health Record system as a new document, not as a superseding document, sites must ensure that the document Set ID is unique in each document sent to HIPS.

ADO ID	Summary	Change description
9316	New “Advance Care” tab displaying only Advance Care Information documents	Advance Care Information is now shown on a dedicated tab when viewing the My Health Record for a selected patient in HIPS UI. The Advance Care tab displays Advance Care Planning Document, Goals of Care Document or Advance Care Document Custodian records. Documents on the Advance Care tab are displayed in reverse chronological order with the ability to toggle between document type grouping or ungrouped documents. These documents are not shown on the Others tab. Some tabs have shorter names to accommodate the new tab: 'Medicare Overview' is now 'Medicare'; and 'Diagnostic Imaging' is now 'Imaging'. When an Advance Care Planning Document or Goals of Care Document is opened, a warning about the safety of the file content is displayed. By default the documents on the Advance Care tab are grouped, however this can be configured by modifying the AdvanceCareInitiallyGrouped setting in the hipsui.Setting table.
9317	Change the current “Advance Care Directive Custodian details are available” indicator on the Patient Summary screen to also include ACP documents	The indicator button 'Advance Care Directive Custodian details are available' has been changed to 'Advance Care Information is available' and is shown if the patient has any one or more of the document types 'Advance Care Document Custodian', 'Advance Care Planning Document' or 'Goals of Care Document'. The style of this button can be customised by the site by modifying the following settings in the HIPS UI hips.Settings table: 'AdvanceCareButtonTextColour' 'AdvanceCareButtonBackgroundColour' 'AdvanceCareButtonBorderColour' 'AdvanceCareButtonFontWeight'
9743	Add DocumentType column to PcehrAudit	HIPS Core has been modified to store the Document Type ID in the PcehrAudit table when there are Upload (including Supersede), Remove and Retrieve document requests. This change allows an operator to join between the PcehrAudit table and DocumentType table to retrieve the Document Type Code and Document Type Description when required. In addition, new document types will be added automatically by HIPS Core during the process.
9795	Deadlocks on Patient list with very large databases	Improvements have been made in HIPS Core so that sites with very large databases will no longer experience deadlocks while loading the patient lists in HIPS UI.
9990	Javascript error in Chrome (ver 67 & above) when accessing embedded patient summary via third party website	HIPS UI has been modified to remove unnecessary JavaScript from the embedded patient summary page which was causing errors and prevented the print button displaying in Chrome versions 67 and above.

ADO ID	Summary	Change description
10073	Patients without IHI not appearing in the Patients without IHI list in HIPS UI	A set of defects in HIPS Core and HIPS UI caused the patient list on the IHI Reconciliation page in HIPS UI to never display any patients. These issues have been resolved in the HIPS 7.2.1 patch. The defects were as follows: 1. The first defect related to the logic used in HIPS Core to identify current and recent patients without IHI. These were incorrectly limited to those under 14 days old, which is the correct condition for the newborn IHI registration function, but incorrect for the IHI reconciliation function. 2. The second defect related to the logic used in HIPS UI to exclude newborns under 1 month old from the patient list. This is correct for the Patients Without IHI tab but not correct for the Duplicate Patients or Other Alerts tabs which should not have had an age filter applied. 3. The third defect related to the handling of patients who are on the current user's list of pinned patients but not currently admitted or recently discharged. When these patients had no IHI they appeared on the Other Alerts tab instead of the Patients Without IHI tab. When they had Duplicate Patient alerts, they did not appear at all. The *Module Guide (UI)* has been updated to reflect the current behaviour. The IHI Reconciliation page has 3 tabs, each of which shows current patients, patients discharged within the configured *PatientsWithoutIhiDaysDischarged* days, and patients who are on the current user's list of pinned patients. • The Patients Without IHI tab shows patients without IHI. Newborns less than 1 month old are not shown in this list because it is normal for newborns to have no IHI. However, newborns can be found using the Lookup by MRN option. The action Check Demographics is available for patients with a current or recent episode. • The Duplicate Patients tab shows patients of any age with Duplicate IHI or Duplicate Patient alerts. The Other Alerts tab shows patients of any age with any other alerts or non-Active IHI status.

ADO ID	Summary	Change description
10174	HIPS Data Archiving Utility	The HIPS data archiving utility manages the growth of the HIPS Core database by periodically archiving rows older than a configured retention period for each table into flat files before clearing the records out of the HIPS-Core database tables. For most tables, rows are deleted after being archived, however for the ClinicalDocumentVersion table, rows are retained with the Package column set to null. Documents whose CDA package is removed in this way can be superseded or removed from the My Health Record but cannot be viewed from the local database. Tables containing HI Service audit logs are archived into “Non-Purgeable” folders as there is a complex retention requirement that often in practice results in the audit logs being kept for an extended period. The remainder of the tables are archived into “Purgeable” folders as the site may purge these files when the site no longer requires the information. Each table archived is compressed to a zip file using the 7-Zip program, which is included in the package. See the Data Archiving documentation for further information and instructions for configuring the scheduled job in SQL Server Agent.
10417	Update Mirth Connect Channels	The Mirth Connect channels and documentation provided with HIPS have been updated to ensure they work with the most recent versions of services and include enough detail for someone with no prior Mirth Connect knowledge.
10420	Upgrade instructions should cover upgrades from version 7.0 and later	The HIPS 7.3 Upgrade Instructions have been modified to cover upgrades from prior to HIPS 7.0 as well as upgrades from HIPS 7.0 and above.
10581	Optimise procedure ClinicalDocumentVersionGet and index ClinicalDocumentId	The ClinicalDocumentVersionGet stored procedure in HIPS Core has been optimised and a new index on ClinicalDocumentId has been introduced to improve performance.
10733	HIPS UI Remove Document tooltip still appeared after clicking the View Document/Remove Document button (IE only)	A minor defect affecting the use of Internet Explorer with the HIPS UI Remove Document screen has been resolved. The tooltip displayed for actions when hovered now disappears when the button is clicked. This prevents the tooltip from lingering on screen once a modal has been opened and closed which had previously obstructed mouse clicks on other 'View' or 'Remove' action buttons.
10796	Removal of an issue that could expose a HIPS site to HI Service compliance risks	HIPS now includes the user’s first and last name in all HI Service requests. Without consistent inclusion of the user’s first and last name in all HI Service requests, HIPS sites would be required, under HI Service Regulation, to retain information about user IDs and associated first and last name for many years.

ADO ID	Summary	Change description
10800	Pathology Report View, Diagnostic Imaging Report View and Health Record Overview could return date/time formats that HIPS could not handle	HIPS Core services now handle additional date/time formats for dates returned by the Pathology Report View, Diagnostic Imaging Report View and Health Record Overview. For example, in rare cases the date/time when a test was requested is only known to be within a particular year or month, so the date format returned is just the year "2019", or just the month and year "2019-08". These are now able to be parsed rather than returning an error to the service consumer.
11047	Document list timeout on Remove Document page	Performance of the View and Remove Uploaded Documents document list page in HIPS UI has been significantly improved.
11319	HPI-I search with different types of address did not behave consistently	Usability of the HPI-I search function has been improved. HPI-I identifier search is used to find an HPI-I using an AHPRA registration number, or to validate an HPI-I identifier. HPI-I demographic search is used to find an HPI-I using a name, sex, date of birth and some components of an address. HIPS UI now consistently applies validation rules and submits either the Australian or international address depending on which panel is opened on the search form. The presentation of search results is improved by only showing fields that have information returned.
11320	Question marks shown in place of accented letters in list of countries in HIPS Core database, affecting HL7 message processing and display on the HPI-I demographic search page	A file encoding issue resulted in accented letters in the names of four countries (1601 Adélie Land (France), 9111 Côte d'Ivoire, 9125 Sao Tomé and Principe, and 9218 Réunion) being replaced with question marks. This issue affected fresh installations of HIPS 7.0 and above, but not upgrades from earlier HIPS versions. The database upgrade tool for this release runs a SQL script that restores the names of these countries to the correct names including the accented letters.
11336	Advanced Search should show a patient if they have only stub episodes under the selected facility.	A defect in the Advanced Search page which prevented patients with only a stub episode from being found has been resolved. These patients will now be found and listed in the search results as a 'Registered' episode.

ADO ID	Summary	Change description
11368	Removal of an issue that could expose a HIPS site to HI Service compliance risks	See ADO 10796 for details. **Note:** HIPS UI can be configured to use Active Directory or Local Machine accounts. For Active Directory, the Full Name field appears to be mandatory, so HIPS UI is not expected to ever fall back to Display Name or User Logon Name and should not error. For Local Machine accounts there are only Full Name and User Logon Name fields, and the Full Name field can be empty, so falling back to User Logon Name is expected to occur for accounts with no Full Name. In this scenario HIPS may prevent users from logging in. By default, if a name cannot be extracted, HIPS UI will prevent the user from logging in and will log an exception which can be viewed by administrators in the ELMAH_Error table. While not recommended, this behaviour is configurable if it causes problems for sites. To allow unnamed users to log in to HIPS UI sites can modify the EnforceHIPSUserAccountsToBeNamed setting in the hipsui.Setting table.
11382	HPI-I international address search field State/Province renamed to City/Town/State/Province	The HPI-I international address search field “State / Province” has been renamed to “City / Town / State / Province” because the HI Service uses the State/Province field of the international address to store the city or town component of the international address.
11544	Gain access page in HIPS UI is presented when using EmbeddedEnterprisePcehrView for a patient where MHR not yet accessed	A Defect has been resolved whereby the Gain access page in HIPS UI was being incorrectly presented when using EmbeddedEnterprisePcehrView if the healthcare provider organisation was not on the provider access list of the patient's My Health Record and the patient did not have a record access code. HIPS is able to correctly gain access to a Patient's My Health Record using the registered enterprise patient ID.
11620	Changes to API Docs package	The folder containing the HIPS Core web services documentation has been renamed from “api-docs” to “HIPS Core Web Services Documentation”, and a text file named “HIPS - Service Catalogue (Core) - README v7.3” has been included in the documentation package to assist with locating this documentation.
11672	GetValidatedIhi response was incorrect for a patient with demographic mismatch	HIPS Core service GetValidatedIhi returned response code “HIPS.CommonSchemas.Exceptions.IhiErrorException” and response code details including a stack trace when the IHI lookup was not successful. The response now indicates the correct code and reason for the IHI lookup being unsuccessful and the current IHI details assigned to the patient.

Audience

- healthcare provider organisations
- diagnostic service provider organisations
- system integrators
- software vendors.

Assurance

HIPS v7.3 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 HIPS.

Implementers are required to perform their own testing of My Health Record conformance test cases that relate to functionality outside of HIPS and declare conformity of their clinical systems in conjunction with HIPS to the My Health Record System Operator.

Documentation of conformance assessments performed for HIPS v7.3 is available from the Agency Help Centre at help@digitalhealth.gov.au or by phoning 1300 901 001.

Licence

The HIPS Binary Software is licensed under the *HIPS Binary Software – Software Licence Terms and Condition*s (included in the HIPS Binary Software Package).

The HIPS Source Code is licensed under the *Source Code License and Production Disclaimer* (included in the HIPS Source Code Software Package).

Support

The HIPS product is provided in both binary and source code form.

The Agency provides support to sites that use the Agency-provided binary version of HIPS[1].

Sites using HIPS binary code that has not been provided by the Agency are generally not supported by the Agency. 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 HIPS.

Please contact the Agency for details of available support services.

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

[1] Sites requiring support by the Agency need to complete the registration process for HIPS Nominated Sites. This may include meeting additional requirements including a commitment to regularly upgrade their HIPS installations to the latest HIPS release.

Future releases

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

Known Issues

No known issues.

Previous releases

The following table lists all previous releases of HIPS.

For a comprehensive of the changes introduced with each of the releases, please refer to the *Functional Change Log* and the *Interface Change Log* documents included with this release.

Date	Release version
February 2020	**HIPS v7.2.2** is a patch product release addressing several defects on the HIPS UI View and Remove Documents screen. Note that some document components in v7.2 have not required updating for v7.2.2 and remain relevant to v7.2.2.
September 2019	**HIPS v7.2.1** is a patch product release addressing a defect regarding patients without an IHI not appearing in the "Patients without IHI" list in HIPS UI Note that some document components in v7.2 have not required updating for v7.2.1 and remain relevant to v7.2.1.
August 2019	**HIPS v7.2** is a minor product release addressing the following: • Pharmacist Shared Medicines List with HPI-I relaxation • CSP certificates • IHI search by address • IHI creation for newborns • My Health Record Assisted Registration for dependants
June 2019	**HIPS v7.1.1** release incorporates enhancements and defect fixes to the HIPS v7.1.0 minor release: • User interface advance search improvements; • User interface patient summary enhancements; and • Implementing defect fixes found from v7.1.0 acceptance testing undertaken by Tasmania and Victoria.
March 2019	**HIPS v7.1.0** is a minor product release candidate used for acceptance testing and addresses the following: • defect fixes • user interface advance search improvements • user interface patient summary enhancements.
March 2019	**HIPS v7.0.2** is a minor product release addressing the following: • Corrects issues with the QueuedPcehrOperation view introduced in HIPS 7.0: The view incorrectly referenced columns from the PcehrAudit table that may be removed as part of audit data migration; the view performed poorly for large data sets.

February 2019	**HIPS v7.0.1** is a minor product release addressing the following: • HIPS-UI: Forward to Different Logout Screen Depending on Entry Route; • HIPS-UI: Auto Forward to a Logout Screen (on session timeout); • HIPS-UI: Move Lookup by MRN above table of current patients on View My Health Record page; • HIPS-Core: Extend GetPatientParticipationStatus service operation to return additional information. For a comprehensive list of changes, please refer to the Release Notes for HIPS v7.0.1.
December 2018	**HIPS v7.0** is a major product release that significantly improves the performance of HIPS for very high load scenarios, particularly for Pathology Report and Diagnostic Imaging Report documents. It consolidates a number of previous branch releases and customisations, making it a suitable target release for upgrades of outdated HIPS installations. The following key improvements are included in this release: • significant performance improvements for very high upload scenarios, particularly for Pathology Report and Diagnostic Imaging Report documents • improved recovery from temporary outages of My Health Record or HI Service • proactive monitoring and reporting of key alert conditions • unified logging of errors from all HIPS components • significant size reduction of audit log, reducing storage requirements • improved support for HPI-I relaxations • support for All Facilities searches and searches for non-inpatients • incorporation of customisations of previous HIPS releases (Northern Territory, South Australia). For a comprehensive list of changes, please refer to the Release Notes for HIPS v7.0.
November 2018	**HIPS v6.2.2** was a controlled release for users upgrading from HIPS v6.2.1 who are not yet ready to upgrade to HIPS v7.0. This version of HIPS resolves a starvation (“Ninject binding”) issue for the HIPS User Interface that can cause the user interface to stall in case of larger numbers of parallel user sessions.
October 2018	**HIPS v6.2.1** was a controlled release for users upgrading from HIPS v6.1 who are not yet ready to upgrade to HIPS v7.0. This version of HIPS provides a substantial number of enhancements and defect fixes, including: • inclusion of the HIPS Monitoring Tool in the main HIPS product • support for automated removals of Pathology Report and DI Report documents: Document Set ID returned for each uploaded HL7™ ORU message • database timeout errors no longer lead to duplication of document sets • support for display of pre-admission episodes • new filter to display only non-inpatients • EPMI information now displayed for patients not registered in target hospital • new configuration flag to prevent issuing of dummy MRNs • login button automatically displayed as disabled after being pressed. This version includes the reliability improvements for the HIPS Core from HIPS v6.1.2 that improve the stability for scenarios with very large numbers of uploaded Pathology Report and Diagnostic Imaging Report documents.

October 2018	**HIPS v6.1.5** was a controlled release for users upgrading from HIPS v6.1.4 who are not yet ready to upgrade to HIPS v7.0. This version of HIPS resolves HIPS User Interface defects affecting the upload function for Level 1A Discharge Summary documents and the display of outdated information in the document list of the Remove Document page.
September 2018	**HIPS v6.1.4** was a controlled release for users upgrading from HIPS v6.1.3 who are not yet ready to upgrade to HIPS v7.0. This version of HIPS resolves a HIPS User Interface issue with the Remove Document page affecting users of Internet Explorer, in which the Refresh button led to the display of potentially outdated information.
December 2018	**HIPS v6.1.3.1** was a controlled release for users upgrading from HIPS v6.1.3 who are not yet ready to upgrade to HIPS v7.0. This version of HIPS resolves a starvation ("Ninject binding") issue for the HIPS User Interface that can cause the user interface to stall in case of larger numbers of parallel user sessions.
August 2018	**HIPS v6.1.3** was a controlled release for users upgrading from HIPS v6.1.2 who are not yet ready to upgrade to HIPS v7.0. This version of HIPS improves the HIPS User Interface workflow for removing pathology and diagnostic imaging reports.
November 2018	**HIPS v6.1.2.1** was a controlled release for users upgrading from HIPS v6.1.2 who are not yet ready to upgrade to HIPS v6.1.3. This version of HIPS resolves a starvation ("Ninject binding") issue for the HIPS User Interface that can cause the user interface to stall in case of larger numbers of parallel user sessions.
June 2018	**HIPS v6.1.2** was a controlled release for users upgrading from HIPS v6.1.1 who are not yet ready to upgrade to HIPS v6.2.1. This version of HIPS is focused on improving the reliability of the HIPS Core for very large numbers of uploaded Pathology Report and Diagnostic Imaging Report documents.
April 2018	**HIPS v6.1.1** was a controlled release for users upgrading from HIPS v6.1 who are not yet ready to upgrade to HIPS v6.2.1. This version of HIPS contains multiple minor enhancements and defect fixes for both HIPS Core and HIPS UI.
November 2016	**HIPS v6.1** merges the functionalities of the previously released eHealth Integration Sample Code (eHISC) and HIPS products. HIPS v6.1 supersedes and combines the functionality of HIPS v5.0 and eHISC v6.0. This version and all future releases of the merged product will be published as HIPS releases only. HIPS v6.1 introduces support for the following views of the My Health Record system: • Pathology Report View • Diagnostic Imaging Report View • Health Record Overview. The following functionality from HIPS v5.0 that was not part of eHISC v6.0 has been included in this release: • support for Secure Message Delivery (SMD) • integration with national directory services (NHSD, NEPS).

April 2016	**HIPS v6.1** of the eHealth Integration Sample Code (eHISC) lets you upload pathology and diagnostic imaging reports to the My Health Record system without needing to generate CDA 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 for 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, which is 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.
February 2016	eHealth Integration Sample Code (eHISC) v2.0.3

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 look up 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.

February 2015 eHealth Integration Sample Code (eHISC) v2.0

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.
Contracted Service Provider (CSP) and Multitenant	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. 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 Organisations" issued to the CSP, instead of connecting with the "NASH PKI Certificate for Health Provider Organisations" issued to each HPO. 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.
SQL Server 2012 Compatibility and High Availability Disaster Recovery through SQL Always On	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.
Document Upload HPI-O Validation	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. 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.
HealthProviderOrganisationPatient Advertised Status Update Fix	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.

April 2014	eHealth Integration Sample Code (eHISC) v1.0
	Release rationale 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.

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