Australian Government

Australian Digital Health Agency

HIPS
Release Note

11 December 2020   v8.0
Approved for external information
Document ID: DH-3195:2020

Related end product identifier: EP-3192:2020

Release rationale

HIPS v8.0 is a major release that provides the following major improvements.

Operational Insights

Gain detailed insights into the performance of your HIPS installation through visualisation of statistics, trends and recovery times after outages.

Track connectivity of HIPS with My Health Record and Healthcare Identifiers Service.

Stay on top of maintenance issues like expiring certificates, storage availability.

Up-to-date HIPS online documentation

All HIPS documentation is now accessible online with improved navigation and search.

For offline usage, all documentation continues to be available in PDF format.

Automated installation

Install HIPS without the need for manual interactions.

All HIPS installation settings can be configured up-front and can be re-used across environments and for future HIPS releases.

Security by default

Get security of your HIPS installation out-of-the-box.

All settings now default to secure settings and can be adjusted to suit local installation requirements.

Deprecation of obsolete interfaces

HIPS service interfaces scheduled for retirement in future releases now generate log messages. Sites can utilise these log messages to schedule upgrades of their system environment in preparation for future HIPS releases.

For a comprehensive list of changes, please refer to the Change details, Removed functionality and Deprecated functionality sections below.

Package inclusions

Updated (supersedes previous version)

Identifier	Name and version
DH-3195:2020	*HIPS – Release Note v8.0* (this document)
DH-3196:2020	*HIPS – Product Data Sheet v8.0*
DH-3198:2020	*HIPS – Binary Software Package v8.0*
DH-3201:2020	*HIPS – Source Code Software Package v8.0*
DH-3199:2020	*HIPS – Interface Change Log v8.0*
DH-3200:2020	*HIPS – Functional Change Log v8.0*

Audience

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

Change details

The following changes are addressed by the HIPS 8.0 release.

ADO ID	Summary	Change description
5044	Pass IHI into HIPS via HL7 ADT message	HIPS Core will extract the IHI from ADT messages and store the value in HIPS when it is provided in the PID segment. The IHI details will be stored in HIPS with IhiFoundBy set to From External System when assigning an IHI to a new patient in the system. When BypassHIService is set to TRUE, HIPS will store the provided IHI details without validating the the IHI and patient demographics with the HI Service. Otherwise, when BypassHIService is set to FALSE, HIPS will validate the provided IHI with the HI Service when either the demographics have changed or the date/time last validated is outside the configured period. IHI Number can be cleared when HL7 null handling is enabled in HIPS by passing in "" (empty double quotes) as the IHI number. For more information, please refer to Patient Administration Processing Guide.
6169	Standardise data archiving mechanism	The HIPS 8.0 release package includes the data archiving mechanism that was previously made available for HIPS 7.x as a standalone add-on package. This mechanism archives and purges specific tables in the HIPS-Core database. It archives rows older than a configured retention period for each table into a text file, compresses the file and stores it in a specific folder. See the Data Archiving documentation for further information and instructions for configuring the scheduled job in SQL Server Agent.

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ADO ID	Summary	Change description
6170	Migrate legacy background processes to new framework	HIPS Core now processes patient lookups through a new queue consumer so that it is consistent with other background processes. IhiCleanupServiceHost is no longer required as it is replaced by the new queue consumer.
		Outstanding lookups in the PendingIhiPcehrLookup table will be lost, but will be automatically retried by the new queue consumer once a request is processed for that IHI.
6396	Remove dependency on HIPS_AppServer post build events & lib folder, replace with NuGet	The build processes provided in the HIPS source code package no longer copy assemblies built by the HIPS_AppServer solution to a parent lib folder as part of post-build events. This copy is no longer required.
6516	Name already taken error HIPS UI login	HIPS UI has been modified to look for existing login with the same username when the user is login via JWT token and only create new login when no login matched the username.
6517	UI - automatic printing not working in IE	This defect is now considered resolved as the printing functionality on the Patient Summary page now works in Internet Explorer, for both Embedded and Standalone mode.
6685	After saving user preferences in Embedded mode HIPS UI should go back to embedded page not home screen	HIPS UI has been modified so that the redirect goes back to the previous url that was accessed before the settings page. An Authority check has also been added to prevent potential attacks by accessing unwanted locations.
6861	The value provided in the 'nullFlavor' provided in Communication Details of CDA documents should be rendered when viewing documents	This defect is now resolved, Communication Details where the nullFlavor has a value provided in the CDA document will now be displayed when the document is rendered.
6989	Pre-admit expected admit date PV2-8 should be stored in Episode AdmissionDate	HIPS Core has been modified to use the value from the PV2-8 segment for the admission date if available and the PV1-44 segment is not available.
7160	Align terminology with advice from Agency: "My Health Record" not "Digital Health Record"	All references to "Digital Health Record" have been replaced with "My Health Record".
7815	Error after changing facilities on Lookup by MRN results on Discharge Summary, Patients without IHI, Disclose Hidden Record and Withdraw Consent	This issue is now considered resolved as the "Select Facility" link is no longer displayed on the affected pages after performing a Lookup by MRN.
7975	Add "currently in the selected Facility" to IHI Reconciliation tabs	The HIPS UI IHI Reconciliation page titles have been appended with "currently in the selected Facility" to make it clear that the lists only include patients with a current episode.
8058	Export configuration on demand	HIPS now comes with a command to generate a JSON file containing the values of all HIPS application settings as may be requested from time to time by HIPS Support.

ADO ID	Summary	Change description
8153	HIPS cannot handle more than one certificate with the same serial	Previously, when replacing NASH certificates in HIPS Core, on a rare occasion sites could experience errors in HIPS when one or more certificates shared the same serial number. This resulted in an inability for the site to use the new NASH certificate and required another replacement certificate to resolve it. This issue has now been resolved by making enhancements to the certificate matching logic.
8185	Uncaught exceptions should not be returned to callers of the NotifyPasEvent service	The new version of the NotifyPasEvent (IDatabaseLoaderServiceV8.NotifyPasEvent) no longer returns SOAP faults from unhandled exceptions.
8193	Deployment automation: Extend HIPS-UI deployment script to apply security protocol best practices	The installation of HIPS UI now applies security best practices by default: It disables SSL 2.0, SSL 3.0, TLS 1.0 and TLS 1.1; enables TLS 1.2; and ensures .NET Framework TLS strong cryptography settings are applied. The deployment script provides an option via the -Insecure switch to bypass applying these best practices if required.
8209	Improve database backwards compatibility through documented database views	Database Views have been added to assist with supporting HIPS and reporting on activities. Sites should use these views in preference to direct table queries to avoid issues that may be caused by structural changes in future database versions.
8613	Improve appearance of error message description [Code: ;Origin]	In HIPS UI, code and origin details in error messages were occasionally shown to users with empty details "[Code: ;Origin]". Code and Origin are now only appended to an error message if their values are not empty.
8642	Declare all previous versions of Web Services as deprecated/obsolete	HIPS Core has been modified to log a message in the hips.SystemEventLog table each time a deprecated service method is called to warn the user the specific service may be removed in a future release. Any web service that has a newer suitable replacement has been marked as deprecated. To make it easier for sites to identify if any deprecated web services are being used, HIPS will log a message to the hips.SystemEventLog with information about the appropriate replacement that can be used each time a deprecated web service is used. This feature is turned on by default and sites can turn off the logging for this event by changing the setting in the log4net.config. Refer to the HIPS 8.0 - Configuring Logging page on Collaborate for more information. The full list of deprecated web services can be found in Interface Change Log document.
9002	Search by MRN clears the screen	This issue is now considered resolved as validation has been applied to the MRN field in the lookup and there is now an option to clear the lookup if a facility is not selected.
9034	Patient registration from Disclose Hidden Digital Health Record page fails when Hospital Code is different to Description	Patient registration from Disclose Hidden Digital Health Record page no longer fails when Hospital Code is different to Description.

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ADO ID	Summary	Change description
9182	Dynamic SQL Function	An unused function that could allow the execution of arbitrary SQL strings was removed from the HIPS Core application.
9199	Validation of HIPS UI input forms	HIPS UI has been modified to validate the input values in forms to prevent cross-site scripting (XSS) attacks. An alert will appear on the specific field if there are illegal characters detected.
9200	Persistent XSS via My Health Record Document and Testing latest Stylesheet v1.6	The generic CDA stylesheet used by HIPS UI has been updated from v1.2.9 to v1.6.0. The JavaScript sanitisation in the new stylesheet includes mitigation of XSS attacks which previously allowed injected JavaScript in uploaded documents being executed when viewed. See https://github.com/AuDigitalHealth/style-sheets/blob/master/CHANGELOG.md for a complete log of changes made to the stylesheet.
9205	Missing Antiforgery Tokens (CSRF Protection)	The ValidateAntiForgery action has been applied to all methods in HIPS UI that make POST requests to protect from Cross-Site Request Forgery.
9206	Model Request Validation Disabled (XSS Protection)	In HIPS UI, the WithdrawConsent, DisclosePcehr, and Remove Document View Models have been modified such that harmful HTML or JavaScript code injected through the 'Reference Notes' field isn't processed by the database and instead is safely filtered.
9210	Webservice Deployment Insecure by Default	HIPS Core has been modified to install only HTTPS & TCP web service endpoints by default, and to enforce the use of HTTP Basic transport security when accessed via HTTPS.
9211	Browser Content Sniffing Header Missing	HIPS UI has been modified by adding the X-Content-Type-Options as a response header for to mitigate potential for XSS attacks via MIME sniffing. By adding this header, browsers should no longer be able to determine the content type based on the content of the file.
9212	Server Technology Information Disclosure	HIPS UI has been modified so that the server information is hidden to prevent an attacker to search for any published vulnerabilities for the reported technology and target their attacks.
9266	Simplify and consolidate message logging	When the hips.SystemEventLog table was introduced in HIPS 7.0, many of the logged messages were sent to both the new table and the existing hips.SystemErrorLog table as we made changes to transition to the new log table. In HIPS 8.0 we completed the transition HIPS now only logs to the hips.SystemEventLog. The hips.SystemErrorLog table will persist until either the site archives and drops the table, or a future HIPS release detects the table is empty and automatically drops the table during an upgrade.

ADO ID	Summary	Change description
9506	Create Configuration API	Configuration management has been significantly restructured and improved in this release. Where possible, HIPS specific application settings for all HIPS components are now managed by a the new Configuration API and any settings overridden from their defaults are stored in the HIPS Core database.
		A new administrative page has been added to HIPS UI and a Configuration Command Line Interface (CLI) is included in the release package for maintaining configuration settings.
		Benefits of the new Configuration API include:
		• A centralised location for setting management. • Most settings can be persisted during an upgrade (refer to documentation for limitations or exclusions). • Settings are validated when set using HIPS UI or the CLI, reducing the chance of invalid configuration. • Components can be aware of each others configuration. • Ability to define scopes for settings, allowing sites to define configurations at the Global, Component, Environment or Facility scope - Note: available scopes vary for different setting types. • Configured settings are obtained at runtime as needed by HIPS Core and HIPS UI components, and cached for a configurable period. Changes to configuration settings are reflected in running components after a restart or the expiry of the cache period. The default caching mechanism uses a process-specific memory cache, but can be configured to use a distributed cache such as Redis. • Ability to store notes when changing settings. • Auditing update or creation of a setting.
		For more information on configuration changes please refer to the documentation on Collaborate.
9578	Create new web services to replace sub-optimal legacy web services	New versions of web services are introduced as required to support new features and to make the HIPS web services more consistent, reliable, supportable and maintainable. To minimise the impact of such changes to connecting systems and to provide a smooth migration path, changes are introduced in new versions of web services, while previous versions of web services are retained in the product, with the absolute minimum of changes. To support the ongoing maintenance of HIPS, older web service versions may be declared as deprecated in an annual major release, and may be discontinued in the next annual major release.
		Specifically, new versions of several key HIPS web services will be provided in HIPS 8.0. The legacy versions of these web services will continue to work, but will be declared as deprecated. Sites will be encouraged to adopt the new versions of the web services provided in HIPS 8.0, but will not be required to do so immediately. The Agency may choose to discontinue some or all of these deprecated web service interfaces in the subsequent HIPS major release, HIPS 9.0.
		For a full list of new webservices, please refer to the Interface Change Log.

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9779	Utility to migrate HIPS 7.x configuration settings to new 8.0 schema	The HIPS deployment scripts have been modified to support migration of existing configuration settings from the following locations into the new centralised configuration setting component: • HIPS UI o hipsui.Setting table o web.config - appSettings and applicationSettings • HIPS Core o config/appSettings.config o web.config - appSettings • HIPS Queue Consumers o app.config - appSettings o General Queue Consumer Settings - prefixed with "QueueConsumer:"
10209	Update deployment scripts to copy deployment artefacts to install location (to cater for later removal)	The deployment process for HIPS Core & HIPS UI has been modified to copy the PowerShell scripts & data files used for deployment to the installation target location so they can later be used for removing the deployed product if required.
10211	Migrate Core facility configuration to new configuration system	HIPS Core facility-level configuration settings are now maintained in the HIPS Core database, aligning the management of these settings with the management of HIPS global configuration settings. Facility-level settings leverage the same configuration system used to manage HIPS global configuration settings. The following facility-level configuration have been migrated: • HospitalCode: HpiiExemption, Pathology_FormatCode, DI_FormatCode, SecurityGroup, EnableRegisterUI, ShowAllPatientsUI • Hospital: AuthorisedEmployeeName, AuthorisedEmployeeUserId, UploadDocumentMinimumAge
10563	Clean-up SystemErrorLog table and related objects	As of HIPS 8.0 log4net is no longer configured to write logs to the [hips].[SystemErrorLog] table. The columns from the [hips].[SystemErrorLog] table have been merged into the [hips].[SystemEventLog] table which is now the only database destination for log output. During the database upgrade for version 8.0+ HIPS will check the state of the hips.SystemErrorLog table, and if empty will remove the table. This is to ensure sites have sufficient time to archive the log history from this table.
10591	Introduce Trace and Debug level logging in HIPS Core	Trace level logging has been introduced to HIPS Core. Initially the trace logs will write before attempting to contact the HI Service or My Health Record System, however the capability has now been added, so new useful trace logs will be added as development continues. Trace logging is not written to the database or logging files by default, but can be enabled as required.
10690	Implement modern authentication & authorisation capability	HIPS 8.0 introduces a new Security API component deployed in the IIS web server, which provides a modern authentication & authorisation capability based on Open ID Connect and OAuth2, and is suitable for securing other HIPS subsystems. In this release the Security API is used to secure the new Configuration subsystem. In future releases, it is anticipated that other subsystems will adopt modern authentication using the Security API.

ADO ID	Summary	Change description
10753	Implement automatic system interaction retry for temporary HI Service and My Health Record System errors	HIPS has been modified to support retrying interactions with the HI Service and My Health Record System. The maximum number of retries and the maximum duration for all retries can be set via configuration for each remote system. These are initially set to reasonable defaults.
10837	Create a "master" HIPS install script	HIPS has been extended to provide a single PowerShell script that can be used to install and/or remove both the HIPS Core and HIPS UI components, including upgrading their databases where required. The script utilises the existing PowerShell scripts and configuration data files provided for HIPS Core and HIPS UI to provide a simple, single script for managing HIPS components.
10922	Include number of rows archived in log output	The Data Archiving Utility in HIPS Core has been modified so that the log output now displays the number of records that have been archived.
11070	Error logged as IHI lookup failed when it was DoesPcehrExist that failed	HIPS Core has been modified to correctly log a My Health Record System outage when a DoesPcehrExist call fails due to Service Unavailability, where it previously and incorrectly logged a HI Service error.
11092	Improve general exception handling to improve stack trace logging	HIPS Core has been modified to ensure exceptions retain the full stack trace history.
11095	Add simple patient search bar to every page	A search bar has been added to the header of each page in HIPS UI to enable users to perform quick searches for patients using the following criteria: MRN, Medicare, DVA, IHI, given name or surname.
11318	Inconsistent use of terms 'Hospital' and 'Facility' in HIPS UI	In HIPS UI the terms 'Hospital' and 'Facility' are used to refer to the same concept. The term 'Facility' is more appropriate as it encompasses various types of healthcare facilities that use HIPS, including hospitals, clinics and diagnostic laboratories. We have made a change to make use of the term 'Facility' in user-visible text throughout HIPS UI.
11329	Add NASH certificate expiry & revocation checks prior to use by HIPS Core	HIPS Core has been modified so that certificates are now checked for revocation and expiry prior to use. In both cases, an error will be logged with appropriate details. Note: Some Test Medicare Location certificates used to connect to the vendor environment of the HI Service have invalid Certificate Revocation List endpoints. These invalid endpoints do not contain fully qualified domain names, which causes HIPS to fail the revocation check for a certificate. To resolve this we recommend configuring HIPS to use a NASH certificate for HiCertSerial, as this is now the preferred approach for interacting with both the HI Service and My Health Record system.
11697	MessageQueue/MessageQueueContent not updated within a transaction	A defect has been corrected where in rare cases a database error while completing a message queue operation would result in an orphaned pending message queue record with no corresponding message queue content record, and this message queue record would never be completed, which would block other messages for the same patient or document from being processed.
11698	Add latest Document Format Codes for Dispense Record	The latest Dispense Record document format codes have been added to the HIPS database.

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ADO ID	Summary	Change description
11721	Poor error message when CDA Set ID not provided in UploadOrSupersedeDocument	HIPS Core has been modified to check if the CDA Set Id is provided. If the CDA Set Id is not provided HIPS will return an appropriate error message in the response of an UploadOrSupersedeDocument request.
11729	Advance Care tab - move 'Group by' box lower	HIPS UI has been modified so that the Advance Care tab's 'Group documents by type' option has been moved closer to the table, reducing the amount of wasted space on the page.
11809	Implement concept of "environments" for HI Service and My Health Record System URLs	HIPS now has an Environment configuration which will allow sites to simply specify either 'Test' or 'Production' rather than having to specify the relevant endpoints. Note: for sites to enable the Production Environment they must have a valid HIPS Registration Key.
11846	IHI Reconciliation shows error message when clicking Check Demographics using default configuration	HIPS UI configuration has been corrected such that the Check Demographics button is now disabled by default. Previously this component of the IHI Reconciliation functionality was left enabled incorrectly. When the Check Demographics button was clicked, HIPS displayed the error message "An unexpected error occurred…". The button is no longer showed to users by default.
11865	Develop Operational Insights Metrics Framework	HIPS 8.0 introduces Operational Insights which utilises metric gathering frameworks to produce insights and alerts based on multi-dimensional data. The solution has been designed such that sites may control which of a pre-defined set of metrics are gathered, and whether these metrics are reported to an ADHA hosted SaaS (Software as a Service) offering, a local text file, or both. Security and privacy concerns have been at the core of each design decision and the SaaS solution has been subjected to rigorous security and legal reviews. For more information, refer to HIPS 8.0 - Operational Insights section under HIPS 8.0 - Operational Guides in the HIPS documentation.
12152	HIPS to require Registration Key when running with Production Environment	Sites are now required to register their HIPS instance prior to production deployment. Sites must review and accept the Terms and Conditions of use, complete the registration form on the HIPS Knowledge Portal, and use the provided HIPS Registration Key to deploy HIPS in Production. We recommend sites begin this process well ahead of a planned go live date. The registration process is documented on the HIPS 8.0 – Registration page on Collaborate.
12233	UploadOrSupersedeDocument should not return faults for Certificate Validation errors	The UploadOrSupersedeDocument service was not handling Invalid Certificate exceptions correctly and would return a fault rather than a HipsResponseMessage as defined in the operation data contract. This issue has been resolved and HIPS will now return a HipsResponseMessage for this service operation if an Invalid Certificate exception occurs.
12307	Upgrade .NET Framework	HIPS components have been updated to use .NET Framework 4.8.
12356	Replace custom version of HI B2B Library with NuGet references	HIPS is now built with NuGet packages that the Agency has published from its open source sample code, including the CDA generation library, CDA packaging library, MDM packaging library, HI Service client library and My Health Record client library.

ADO ID	Summary	Change description
12421	Configurable HIPS UI authentication methods	HIPS Configuration and HIPS UI has been modified by adding three configuration settings that are configurable to set the type of logins available to HIPS UI.
12517	The HiWebServiceName in HpiiLookupAudit should record batch vs single search	HPII Audit records are now able to distinguish the audit type by: • HI_ProviderSearchForProviderIndividual.searchForProviderIndividual • HI_ProviderBatchAsyncSearchForProviderIndividual.submitSearchForProviderIndividual • HI_ProviderBatchAsyncSearchForProviderIndividual.retrieveSearchForProviderIndividual
12518	The HpiiLookupAudit table should store the local provider identifier	When HIPS validates the HPI-I for a local provider it will now store the LocalProviderCode identifying that provider into the HpiiLookupAudit table to assist with connecting the audit record with the local record identifiers in the HealthProviderIndividual and HospitalHealthProviderIndividual tables.
12535	Modify HIPS UI to use new web services in place of the sub-optimal legacy web services which have been deprecated	HIPS UI has been modified to use the new web services in place of the sub-optimal legacy web services which have been deprecated.
12613	Entering additional space character before, between or after given names produces an ugly error message	The HPI-I search pages in HIPS UI will now ignore spaces before, between or after given names.
12661	The CorrelationId column in the HpiiLookupAudit table is not being populated	HIPS now correctly logs the CorrelationId in the hips.HpiiLookupAudit table.
12668	Names of the providers should be limited to 40 characters	Previously HIPS would allow more than 40 characters for a provider's name to be sent to the HI Service for validation, when saving the local provider. HIPS will now remove leading and trailing white space then truncate the family and each given name to 40 characters for the search.
12883	Cache compiled XSLT style sheets	HIPS UI uses the Agency's XSLT style sheets to render CDA documents and views into HTML for display in the web browser. Before the style sheet is used to transform a CDA document, the XSLT processor must compile the style sheet. This process takes approximately 600-700ms of CPU time. HIPS UI now performs style sheet compilation once on startup and holds the compiled style sheets in memory, rather than repeating the process each time a CDA document is rendered. This is expected to result in faster page loading and reduced CPU usage on the HIPS UI server when users are viewing CDA documents.
12884	Enhance HIPS UI performance under high load by configuring the number of threads created on demand to handle requests	HIPS UI has been modified to support two new configuration settings for sites to provide customised values for 'ThreadPoolMinWorkerThreads' and 'ThreadPoolMinIOThreads' which allows sites to override the minimum number of threads the thread pool creates before throttling, which can help tune the performance of HIPS UI.

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12941	Add resilience for database timeouts after upload	In some cases a temporary database issue encountered after a clinical document was uploaded to the My Health Record could result in HIPS placing the upload attempt back on the queue. This caused the upload to be performed multiple times. HIPS now has more resilient logic which detects and retries the save of My Health Record audit records to the database if a database concurrency, deadlock or timeout error is encountered.
12994	Episode type filter label is being shown without the options in HIPS UI after the MRN lookup	On the Clinical Documentation/View My Health Record page, the "Episode Types" filter label is no longer shown when there are no Episode Type checkboxes, e.g. after an MRN lookup.
13012	Update HIPS with latest PcehrErrorCodes	The hips.PcehrErrorCode table has been updated to contain the latest available error codes for the My Health Record System.
13033	Prevent use of Create Verified Newborn IHI service in HIPS	Authorisation to invoke the Create Verified Newborn IHI service has been withdrawn. The CreateVerifiedIhiForNewborn web service now return a fault indicating the service is disabled. This functionality will be completely removed in a future release.
13224	Add latest Document Format Codes for Prescription Record	The latest Prescription Record document format codes have been added to the HIPS database.
13225	Add latest Document Format Codes for Event Summary	The latest Event Summary document format codes have been added to the HIPS database.
13226	Add latest Document Format Codes for Shared Health Summary	The latest Shared Health Summary document format codes have been added to the HIPS database.
13306	HIPS UI - Add SameSite attribute to Embedded Viewer Token Cookie	When HIPS UI is embedded within an iframe in another web application, some web browsers, including Chrome version 84 and higher, will not send the required cookies to the HIPS UI server, because the cookies do not have the 'SameSite' attribute set to 'None'. HIPS now supports setting the SameSite flag on the cookies used by HIPS UI for authentication, session information and request validation. To allow embedding HIPS UI within another web application, the SameSite flag must be set to 'None' for each of the 3 cookies, as described in the documentation page HIPS 8.0 - Configuring HIPS UI for Embedded Use.
13326	Update HIPS archiving documentation for Windows Task Scheduler	The HIPS documentation has been updated to include instructions on how to configure and run the HIPS Database Archiving script from a non database server using Windows Task Scheduler.
13492	Support specifying the Active Directory container in configuration	HIPS UI has been modified to allow sites to specify an Active Directory container for authenticating users. In some cases, when HIPS is deployed in a very locked-down environment users may be unable to login to HIPS UI when the default container is used. Please note: Where Active Directory authentication is used, HIPS UI must be able to identify the groups a user belongs to in Active Directory, as such each user of HIPS UI must have permission to read its own group membership and properties in Active Directory. Denying users access to read certain containers may affect reading group membership, even if the user object is not inside those containers.

ADO ID	Summary	Change description
13551	Check for presence of superseded document on patient's MHR when upload returns PCEHR 3002 ERROR	Sometimes while uploading a document, the My Health Record saves the document successfully but an unexpected error (such as connection being closed, database timeout, etc.) may occur, resulting in HIPS not being able to correctly save the outcome of the upload. HIPS will consider the upload failed with a transient error, and retry again. During the retry, the My Health Record system will return an error. For an upload of a new document, the error is of the form "XDSRegistryMetadataError Metadata Validation Errors: SubmissionSet uniqueId 1.2.36.1.2001.1005.49.1.8003621566687292.109002^109002 (id = SubmissionSet01) already present in the registry" and HIPS recognises this form of error to mean that the document was successfully uploaded and HIPS will proceed to store the document as successfully uploaded. For an upload of an amended document that supersedes a prior version, the error returned is "PCEHR_ERROR_3002 - Document metadata failed validation" which is misleading and ambiguous. Previously HIPS would treat this error as a failure and not store the document as successfully uploaded. To fix this issue, when the My Health Record returns "PCEHR_ERROR_3002" for a document upload, HIPS will now retrieve the document list from the My Health Record system, filtered by the CDA document ID of the document. If the document is found, HIPS will treat the upload operation as successful and HIPS will proceed to store the document as successfully uploaded. Otherwise, HIPS will treat the upload operation as failed with the "PCEHR_ERROR_3002" error that was returned.
13597	Machine context login error "User could not be validated successfully"	Improved reliability of HIPS UI login when HIPS UI is configured with the Account Management Context Type of Machine to validate users in the local machine directory on the HIPS application server rather than an Active Directory domain.
13718	IPatientServiceV5.GetPatientInHospitalDetails returns SOAP fault ItemNotFoundFault not declared in interface	The IPatientServiceV5.GetPatientInHospitalDetails would incorrectly return the SOAP fault ItemNotFoundFault which was not declared in interface. The IPatientServiceV5.GetPatientInHospitalDetails has been deprecated and a new version of GetPatientInHospitalDetails has been added to PatientServiceV8_0_0 which has the correct set of SOAP fault types declared in its interface.
13746	Mirth ADT channel multi-threaded processing is ineffective because the Patient ID is in the wrong map	Multi-threaded processing was previously ineffective in the sample Mirth Connect channel for Patient Administration HL7 v2 messages. This channel was found to process one message at a time instead of multiple messages in parallel as intended. This was due to the source transformer storing the Patient ID in the connector map instead of the channel map. This has been corrected, so that the channel will now process multiple messages for different patient IDs in parallel, while keeping messages for the same patient in the correct sequence.
13752	Opening attachment from ANY document for a patient is showing Not Found error when a document's attachment is missing	HIPS UI will now show an error message when an attachment is not found within a CDA package, and show a back button to return to the CDA document.

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ADO ID	Summary	Change description
13882	Migrate HIPS release documentation to Agency's Collaborate site	The documentation structure in this release has been significantly changed and is now provided in a web-based format rather than the PDF format provided in past releases. This provides the following benefits to document consumers: • Content has been re-organised in a more logical structure, • Ability to search for keywords through entire documentation or find text on pages, • Related links provided on many pages, • Easily accessible from any location, • Can be maintained post release. For more information on the general changes that have been made to the HIPS Documentation, please refer to the HIPS 8.0 - Documentation Changes page on Collaborate. Note that some documents will continue to be included in the release package. These include Release Notes, Functional Change Log, Product Data Sheet, Interface Change Log, Software Licence Terms and Conditions, HIPS - Source Code Licence and Production Disclaimer and HIPS - Third Party Software Licences.
14639	Superseding a Discharge Summary document from Advanced Search page is not working	Fixed an error in the Upload Level 1A PDF Discharge Summary feature of HIPS UI which could prevent users from superseding a discharge summary. When a user used the Advanced Search page to find a patient and clicked on Enter Discharge Summary and Supersede to supersede a discharge summary, an error "The requested page could not be found" was displayed. The error did not occur if the patient was found in the patient list, but only when the patient was found via Advanced Search. The error is no longer displayed and the discharge summary can be superseded as expected.

Removed functionality

As new and improved functionality is introduced to HIPS, some older implementations of similar functionality may be removed from time to time to reduce the overhead in maintaining outdated functionality and encourage sites to adopt the new improved functionality. In this release the following functionality has been removed:

ADO ID	Summary	Rationale for removal	Revised operational process
9084	**Remove & archive HIPS Demo Harness** The HIPS Demo Harness was previously provided in the HIPS release package as an early evaluation tool. It allowed users to craft and send various messages to HIPS and check the outcome of the message.	Poll results indicate the functionality of the tool is not relevant for current users.	The evaluation guide previously provided in the packages suggested using the HIPS Demo Harness, or Soap UI to evaluate HIPS. Soap UI is a widely used product, thus additional focus has been placed on documenting more scenarios with Soap UI.
9085	**The HIPS Monitoring Tool has been removed as of HIPS 8.0** This tool was initially developed for HIPS 4.0 for certain state/territory jurisdictions and later included with the HIPS product from HIPS 6.2 onwards. The monitoring tool queries certain audit and log tables in the HIPS database to gather statistics on received HL7 messages, connectivity with the HI Service and My Health Record systems and various categories of errors and warnings in the HIPS logs.	The approach of querying audit and log tables was found not to scale adequately as sites increased usage of HIPS and has been replaced by a superior solution called Operational Insights.	We recommend sites register for Operational Insights and use the dashboards and alerts in Azure Application Insights as a replacement for the functionality of the HIPS Monitoring Tool.

ADO ID	Summary	Rationale for removal	Revised operational process
9266	**Stop logging to the hips.SystemErrorLog table**	When the hips.SystemEventLog table was introduced in HIPS 7.0, many of the logged messages were sent to both the new table and the existing hips.SystemErrorLog table as changes were made to transition to the new log table. In HIPS 8.0 the transition was completed. HIPS now only logs to the hips.SystemEventLog.	Sites should start referring to the hips.SystemEventLog table for error details, rather than the hips.SystemErrorLog table. The hips.SystemErrorLog table will persist until either the site archives and drops the table, or a future HIPS release detects the table is empty and automatically drops the table during an upgrade. HIPS will automatically log all message to the hips.SystemEventLog.
13033	**Prevent use of Create Verified Newborn IHI service in HIPS**	Authorisation to invoke the Create Verified Newborn IHI service has been withdrawn by the operator of the HI Service.	The CreateVerifiedIhiForNewborn web service now returns a fault indicating the service is disabled, sites should no longer use this web service. This functionality will be completely removed in a future release.

Deprecated functionality

As new and improved functionality is introduced to HIPS, some older implementations of the same functionality may be deprecated from time to time to reduce the overhead in maintaining outdated functionality and encourage sites to adopt the new improved functionality. In this release the following functionality has been deprecated:

Note: Deprecated functionality remains in the release it is deprecated in and may be removed in the next major release.

ADO ID	Summary	Rationale	Migration options and revised operational process
8642	**Declare all versions of Web Services as deprecated/obsolete where the Web Service has been superseded** HIPS Core has been modified to log a message in the hips.SystemEventLog table each time a deprecated service method is called to warn the user the specific service may be removed in a future release. Any web service that has a newer suitable replacement has been marked as deprecated.	As new and improved functionality is introduced to HIPS, some older implementations of the same functionality may be deprecated or removed from time to time to adopt the new improved functionality.	HIPS implementers should utilise the time between the deprecation of a web service interface and its discontinuation, which will be no sooner than the following major release, to redirect their connecting systems to the alternative web service interface. Implementers should refer to the specific advice provided for each web service in the Interface Change Log - Deprecated section. To make it easier for sites to identify if any deprecated web services are being used, HIPS will log a message to the hips.SystemEventLog with information about the appropriate replacement that can be used each time a deprecated web service is used. This feature is turned on by default and sites can turn off the logging for this event by changing the setting in the log4net.config. Refer to the HIPS 8.0 - Configuring Logging page on Collaborate for more information.

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Known issues

We have identified the following open issues in this release:

ADO ID	Summary	Issue description
12508	HIPS UI is unable to load any pages when the Server Technology Information is configured to be hidden on Windows Server 2012	A fix was implemented as part of *ADO 9212 Server Technology Information Disclosure* at the recommendation of a security assessment which removed the Server response headers when the HIPS-UI server returns information. This fix was not compatible with Windows Server 2012 and IIS <10.0 and caused the HIPS UI site to return a 500 response code when loading pages. It also causes the deployment script to error on the HIPS UI verification step. **Resolution** Option 1. The recommended solution for this issue is to install the new version of HIPS on the latest supported Windows OS. Option 2. If sites would like to proceed with the installation on Windows Server 2012, prior to installation sites should modify the *HIPS-Web\runtime\web\Web.config* located in the installation package by removing the following section from the file: *<security>* *<requestFiltering removeServerHeader="true" />* *</security>* Please note the server hosting HIPS-UI will return information on what technology and version of the technology it is running if this option is used.
13893	Support users with only one name	HIPS web services have validation on the LocalUser DTO that requires both Given Names and Family Name to be not null or empty. Unfortunately HIPS does not have any special support for users who have only one name. There is no OnlyName flag and HIPS cannot tell the difference between users who really have only one name, and users whose name was left out. HIPS therefore requires a value for both GivenNames and FamilyName. Sites that have users with only one name could work around this limitation by: - duplicating the user's only name in both the First and Last name fields, or - putting the user's only name in one of the fields and a dummy value in the other.

ADO ID	Summary	Issue description
13871	Operational Insights alert "IHI Lookup Alert" should not include failures due to HI service unavailability	Although built to the requirements, while testing we found the IHI Lookup Alert for Operational Insights currently has unreliable results due to the inclusions of HI Service availability outcomes. HI Service availability outcomes are managed by a separate metric so this metric should be redesigned in a future release to exclude the availability related results.
14533	In recent Edge/Chrome browsers, when viewing the My Health Record in embedded mode, after navigating from the attached PDF back to the CDA document, the Print button has no effect	This issue was introduced by a browser change in Chrome 78 and Edge 80 and impacts all versions of HIPS UI. Workaround: If the Print button doesn't work after navigating back from the PDF to the CDA, users can still print the document by clicking the Close button, clicking the document to open it again, then clicking Print. A future release of HIPS will resolve this issue.

Assurance

HIPS v8.0 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 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 v8.0 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 binaries built from source code 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.

Implementers who do this must undertake comprehensive conformance testing with the Healthcare Identifiers (HI) Service and the My Health Record system.

Please contact the Agency for details of available support services.

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

Future releases

HIPS will be released on an ad hoc basis, based on providing new functionality or other changes as required. Typically, this has a cadence of one annual major release and 2-3 minor releases per year, with patch releases as required.

Previous releases

Date	Version
April 2020	**HIPS v7.3** is a minor product release addressing the following: • Advance Care Planning and Goals of Care Uploads • HL7 Validation and processing enhancements • Security enhancements
September 2020	**HIPS v7.2.4** is a patch release for HIPS v7.2. It provides added resilience for database timeouts after uploading documents.
July 2020	**HIPS v7.2.3** is a patch release for HIPS v7.2. It provides important defect fixes for the use of the HIPS User Interface in Embedded Mode.
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
July 2020	**HIPS v7.1.4** is a patch release that removes an issue that could expose a HIPS site to HI Service compliance risks.
July 2020	**HIPS v7.1.3** is an incremental release that incorporates an enhancement to the HIPS v7.1.2 patch release.
January 2020	**HIPS v7.1.2** release incorporates enhancements to the HIPS v7.1.1 minor release: • Add user's name to ID field in HI Service requests for auditing
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.

Date	Version
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.

Date	Version
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.

Date	Version
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

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Date	Version	
		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.