



HIPS Functional Change Log

6 May 2021 v8.2
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Summary

This document provides an overview of the changes for each HIPS release and can be used to identify the defect fixes and functional enhancements that have been incorporated.

HIPS 8.2

ADO ID	Summary	Change description
Enhancement 14527	Replace Advanced Search with Patient Management	The new Patient Management page has replaced the previous Advanced Search and quick search results pages. The functionality of both pages has been consolidated into the new page.
Enhancement 11413	Make pinning a patient as a favourite easier after searching for a patient	The new Patient Management page allows users to pin and unpin a patient by selecting the star icon in the list of search results.

ADO ID	Summary	Change description
Enhancement 14246	HIPS UI - Add new COVID-19 and other immunisations view	<p>The Patient Summary landing page in HIPS UI, which is presented to users when they view a patient's My Health Record, has had the following changes made to it to facilitate quicker consumption of the patient's immunisation data:</p> <ul style="list-style-type: none"> • The existing "Health Record Overview" tab title has been changed to "Patient Overview", • A new "Patient Summary" section is now displayed above the "Health Record Overview" section and contains an expandable section for displaying immunisations sourced from the Australian Immunisation Register section of the patient's Medicare Overview. • The immunisations panel can be configured to highlight particular vaccines in the table, e.g. COVID-19 related vaccines. However, any vaccines can be configured. • When vaccines to be highlighted are configured there is a checkbox allowing the highlight to be toggled off and on. The "condition" in the label of this checkbox can be configured, with the default set to "COVID-19". • No vaccines to be highlighted are configured by default and the table will not show any highlights or the checkbox until they are configured. • The title of the immunisation panel can be configured by the site, with the default set to "COVID-19 and other immunisations".
Enhancement 14400	Add new Configuration Settings for Patient Management feature	<p>Three new settings have been added to the Configuration API specifically for the new Patient Management functionality:</p> <ul style="list-style-type: none"> • ViewMyHealthRecordMenuItem – controls which page the View My Health Record menu item goes to in HIPS UI. Options include: PatientList or PatientSearch. • MrnGeneration – Determines whether HIPS UI should generate MRNs automatically when registering patients, or allow manual entry. This is configurable per non-PAS feed facility. • MrnGenerationStartValue – determines the initial MRN that should be used when HIPS is configured to auto generate MRNs.
Enhancement 14436	Display the user's pinned patients on the Patient Management page as the default view	<p>To make it easier for users to find their pinned patients, the new Patient Management page will show the current user's pinned patients when first opened. The list of pinned patients provides the same functionality as the search results, allowing quick access to the user's authorised HIPS UI functionality.</p> <p>The pinned patient list is replaced by search results once the user performs a search on the page.</p>

ADO ID	Summary	Change description
Enhancement 14520	Allow users to register new patients from the Patient Management screen	For non-PAS feed facilities authorised HIPS UI users can register a new patient from the new Patient Management page by selecting the "Register New Patient" button which is enabled after a search is performed. A register patient modal will be shown allowing the user to enter the patient details. Note: If the MrnGeneration setting is set to true for the selected facility, the MRN will be automatically generated and set to read only.
Enhancement 14526	Allow updating of patient registration details from search results	The new Patient Management page in HIPS UI allows a user to update patient registration details by selecting the 'Update Registration' action button in the search results. Note: this functionality is only available for non-PAS feed facilities.
Enhancement 14528	Change Quick Search results to be displayed using the new Patient Management page	In HIPS UI the Quick Search results are now displayed on the new Patient Management page.
Enhancement 14532	Add MRN generation logic for patients registered from the HIPS UI - Patient Management page	When registering a new patient in HIPS UI, if the MrnGeneration setting is set to true, an MRN will be generated automatically by HIPS. For more detail on the MRN Generation logic refer to the HIPS UI - Manual Patient Registration page under Operational Guides.
Enhancement 14896	Include navigation back to the Patient Management page, and retain the state of search results table	After selecting an action from the new Patient Management screen, the link to go back will return to the Patient Management screen with the results table displayed as it was before clicking the action.
Enhancement 15145	Provide Test and Production defaults for NashIssuerName setting	HIPS now provides appropriate defaults for the NashIssuerName setting for non-production and production environments. Non-production environments are expected to use test NASH certificates issued by the "Test Medicare Australia Organisation Certification Authority", whereas production environments are expected to use production NASH certificates issued by the "Medicare Australia Organisation Certification Authority".

ADO ID	Summary	Change description
Enhancement 15457	Extend the table of immunisations panel, with the ability to view the Consolidated Immunisations View (CIV) document, when available, and to also view the Australian Immunisation Register document via the selection of new buttons.	<p>In HIPS UI the immunisations panel in the Patient Summary has been enhanced in preparation for the Consolidated Immunisation View document:</p> <ul style="list-style-type: none"> • If immunisations from the Australian Immunisation Register are available in the patient's My Health Record, the immunisations panel will show the table of immunisations from the Australian Immunisation Register extracted from the Medicare Overview, with configurable highlighting functionality. • The immunisations panel can be configured to highlight particular vaccines in the table, e.g. COVID-19 related vaccines. However, any vaccine names can be configured for highlighting. • When vaccines to be highlighted are configured there is a checkbox allowing the highlight to be toggled off and on. The "condition" in the label of this checkbox can be configured, with the default set to "COVID-19". • No vaccines to be highlighted are configured by default and the table will not show any highlights or the checkbox until they are configured. • If information from the Australian Immunisation Register is available in the patient's My Health Record, the Australian Immunisation Register button will appear in the panel. This button displays an Australian Immunisation Register document with information from the Australian Immunisation Register. • Once the My Health Record Release 12 is available, HIPS sites may configure the document type code of the Consolidated Immunisation View in the ImmunisationDocumentTypeCode setting. This will enable the Consolidated Immunisation View button. This button will display a Consolidated Immunisation View document with information from the Australian Immunisation Register and other documents in the My Health Record. • The panel title is configurable and by default is 'COVID-19 and other immunisations'.
Enhancement 15458	Add ClinicalDocumentGet stored procedure enhancement	The hips.ClinicalDocumentGet stored procedure has been enhanced and now performs significantly better.

ADO ID	Summary	Change description
Enhancement 15464	Disable Assisted Registration functionality in HIPS	<p>Continuing to maintain Assisted Registration functionality in HIPS is a large overhead, particularly in regression and conformance testing. Recent investigation into the relevance of Assisted Registration moving forward found that the usage is very very low, with sites confirming they do not see any benefit in continuing to offer Assisted Registration as part of the HIPS functionality, therefore all Assisted Registration functionality has been disabled in this release.</p> <ul style="list-style-type: none"> • HIPS Core Assisted Registration services will now return the following SystemError response or fault: "Assisted Registration is disabled." • Assisted Registration pages in HIPS UI have been removed. • All references to Assisted Registration in Configuration and Documentation now include a note that "Assisted Registration is disabled."
Enhancement 15664	Allow Others tab document type exclusions to be configurable	HIPS UI has been enhanced to allow configurable document type exclusions in Other tab of Patient Summary page, using the OtherTabDocumentTypeExclusions setting.
Defect 8765	The update button displayed after performing an MRN lookup can result in a new patient being created if the MRN in the lookup field is changed before clicking update	HIPS UI will no longer present the Register or Update button in the Lookup by MRN section on the patient list page after the Lookup MRN is performed if the value originally entered in the MRN field is modified.
Defect 11424	Navigation links in the Medicine tab do not work in Firefox	A defect in Firefox prevented internal links in CDA documents displayed in frames inside HIPS UI from scrolling the page up and down. This did not affect the links that open the attachments of the document. A workaround for Firefox has been added on the View My Health Record page. The workaround uses JavaScript to scroll the page to bring the target of the link into view.
Defect 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	Changes in recent versions of the Edge and Chrome browsers were found to cause an issue in HIPS UI. When viewing the My Health Record in embedded mode and after navigating from an attached PDF back to the CDA document the Print button had no effect. This issue has now been resolved.
Defect 14898	Quick search is displayed regardless of configured permissions	Quick search is no longer visible to a user when they do not have authorisation to access the functionality.
Defect 15059	Quick search bar on the Adult and Child Assisted Registration page logs a jQuery error and does not execute the search	In HIPS UI the quick search bar on the My Health Record assisted registration pages did not execute a search and would throw a jQuery related error on the browser console, the issue has been resolved, and the quick search can now be used from this page.

ADO ID	Summary	Change description
Defect 15088	HL7 Ack queue can occasionally get the error "Input string was not in a correct format" which causes message to retry indefinitely	The queue consumer code that retrieves a new item from the each of the HL7/Reports and HL7/Acknowledgements queues has been made more resilient to avoid a situation where an error caused an item to retry indefinitely.
Defect 15136	Unable to view document when document contains invalid patient date of birth	HIPS UI will now handle missing demographic information in CDA documents and return friendly demographic mismatch warning messages rather than exceptions or invalid document errors.
Defect 15175	HL7MessageLog update stored procedure incorrectly truncates CorrelationId to 40 characters	The CorrelationId parameter in the HL7MessageLogUpdate stored procedure has been adjusted to support 200 characters to prevent truncating of the value in the HL7MessageLog table when they are updated.
Defect 15185	Failure to revalidate an IHI when existing enterprise patient is registered into a new facility due to not checking for demographic change	Previously HIPS would skip revalidation of an IHI with demographic mismatch status when an existing enterprise patient was registered into a new facility with different demographics, as HIPS would not check for demographic changes. HIPS will now perform demographic checks for these patients, and will revalidate the IHI if a change in demographics is detected, as it currently does for other existing patients.
Defect 15283	Quick search finds no results when searching for multiple given names	<p>The default value for BasicPatientSearchHelp setting has been updated to clarify how names can be searched for using the quick search functionality.</p> <p>The following default description applies when full text indexing is not enabled on the database:</p> <p><i>"Search for a patient by entering the MRN, Medicare, DVA, IHI or name. To search by name, you may enter the surname alone, or the full name as 'Surname, Firstname Middlenames' or 'Firstname Middlenames Surname'."</i></p> <p>If full text search indexing is enabled during HIPS installation process (using the Optional_HIPS_EnableFullTextIndexSearch.sql file), unless already set by the site the BasicPatientSearchHelp setting value will be changed to:</p> <p><i>"Search for a patient by entering the MRN, Medicare, DVA, IHI or name. To search by name, you may enter the surname alone, a single given name or the full name with surname and one or more given names."</i></p> <p>Sites can further customise the BasicPatientSearchHelp setting value using the Configuration Management page in HIPS UI, or via the Configuration CLI.</p>

ADO ID	Summary	Change description
Defect 15726	Users should not be able to access the login page when already logged in	Previously in HIPS UI, when an authenticated user tried to access the login page, such as via a bookmark, they would be presented with the login page surrounded by navigation. This was due to the user already being authenticated. HIPS UI will now prevent the login page from being displayed to users who are already logged in. Instead, it will redirect to the page specified in the return url, or if not specified it will redirect to the home page.
Defect 16910	Double IHI look up is occurring when ADT message includes updated patient demographics	A defect introduced in HIPS 8.0 has been resolved which would cause double IHI lookups to be performed when an ADT message with invalid demographics was followed by another ADT message that contained updated and valid patient demographics.

HIPS 8.0.1

ADO ID	Summary	Change description
14878	HIPS UI shows an incorrectly cached list of accessible healthcare facilities	An issue in the caching logic in HIPS UI resulted in a cached set of accessible healthcare facilities being shared for all users for the cache lifetime configured in FacilityRepositoryAbsoluteExpirationOffset (default 2 hours). The cached facilities were those accessible based on the roles of the first user to log in. Subsequent users logging in would see the same set of facilities, regardless of their own roles. HIPS UI has been modified to ensure each set of roles has its own cache of accessible facilities.

HIPS 8.0

ADO ID	Summary	Change description
5044	Pass IHI into HIPS via HL7 ADT message	<p>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.</p> <p>When BypassHIService is set to true, HIPS will store the provided IHI details without validating 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.</p> <p>The IHI Number can be cleared when HL7 null handling is enabled in HIPS by passing in "" (empty double quotes) as the IHI number.</p> <p>For more information, please refer to the Patient Administration Processing Guide.</p>

ADO ID	Summary	Change description
6169	Standardise data archiving mechanism	The HIPS 8.0 release package now comes bundled with 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. See the Data Archiving documentation for further information and instructions.
6170	Migrate legacy background processes to new framework	HIPS Core now processes pending patient IHI and My Health Record lookups via a new queue consumer in the background. Please note: Outstanding lookups in the hips.PendingIhiPcehrLookup table will be lost but will be automatically retried by the new queue consumer once a request is processed for the patient.
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 as this copy is no longer required.
6516	Name already taken error HIPS UI login	HIPS UI has been modified to check for an existing login with the same username when the user is login via JWT token and will now only create a new login when none are found.
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 when the PV1-44 segment is not available.
7160	Align terminology with advice from Agency: "My Health Record" not "Digital Health Record"	All visible references to "Digital Health Record" have been replaced with "My Health Record" in HIPS Core and HIPS UI.
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.

ADO ID	Summary	Change description
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.
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 the 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 improvements 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 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.

ADO ID	Summary	Change description
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.
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	<p>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 the new Configuration API and any settings overridden from their defaults are stored in the HIPS Core database.</p> <p>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.</p> <p>Benefits of the new Configuration API include:</p> <ul style="list-style-type: none"> • 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 are 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. <p>For more information on configuration changes please refer to the documentation on Collaborate.</p>
9578	Create new web services to replace sub-optimal legacy web services	<p>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.</p> <p>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.</p> <p>For a full list of new webservices, please refer to the Interface Change Log.</p>

ADO ID	Summary	Change description
9779	Utility to migrate HIPS 7.x configuration settings to new 8.0 schema	<p>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:</p> <ul style="list-style-type: none"> • HIPS UI <ul style="list-style-type: none"> ○ hipsui.Setting table ○ web.config - appSettings and applicationSettings • HIPS Core <ul style="list-style-type: none"> ○ config/appSettings.config ○ web.config - appSettings • HIPS Queue Consumers <ul style="list-style-type: none"> ○ app.config - appSettings ○ General Queue Consumer Settings – only those prefixed with “QueueConsumer:”
10209	Update deployment scripts to copy deployment artefacts to install location (to cater for later removal)	<p>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.</p>
10211	Migrate Core facility configuration to new configuration system	<p>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:</p> <ul style="list-style-type: none"> • HospitalCode: HpIiExemption, Pathology_FormatCode, DI_FormatCode, SecurityGroup, EnableRegisterUI, ShowAllPatientsUI • Hospital: AuthorisedEmployeeName, AuthorisedEmployeeUserId, UploadDocumentMinimumAge
10563	Clean-up SystemErrorLog table and related objects	<p>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 if desired.</p>
10591	Introduce Trace and Debug level logging in HIPS Core	<p>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.</p>
10690	Implement modern authentication & authorisation capability	<p>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.</p>

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.
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 all 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 until manually resolved.
11698	Add latest Document Format Codes for Dispense Record	The latest Dispense Record document format codes have been added to the HIPS database.

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 validation 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 update the full set of endpoints 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, while the other related settings were in a disabled state by default. 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 now references 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 UI now allows sites to configure which login methods are available to all users. The relevant configuration settings are: <ul style="list-style-type: none"> AllowLoginWithJsonWebToken, AllowLoginWithUsernamePasswordForm and AllowLoginWithCurrentWindowsUserAccount
12517	The HiWebServiceName in HpiiLookupAudit should record batch vs single search	HPII audit records are now able to distinguish the audit type by: <ul style="list-style-type: none"> 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 latest versions of 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 consistently 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 may help tune the performance of HIPS UI.

ADO ID	Summary	Change description
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 Embedding.
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	On a rare occasion while uploading a document, the My Health Record saves the document successfully but an unexpected error (such as the 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 uniquenessId 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 display an error message when an attachment is not found within a CDA package and show a back button to return to the CDA document.

ADO ID	Summary	Change description
13882	Migrate HIPS release documentation to Agency's Collaborate site	<p>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:</p> <ul style="list-style-type: none"> • 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. <p>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.</p> <p>Note that some documents will continue to be included in the release package. These include:</p> <ul style="list-style-type: none"> • 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	<p>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.</p>

HIPS 7.3

ADO ID	Summary	Change description
556	Address handling of errors in AR causing additional errors in ELMAH logs.	<p>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.</p>

ADO ID	Summary	Change description
5354	The HealthProviderIndividualHpii table doesn't have foreign key relationships	<p>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:</p> <ul style="list-style-type: none"> • HealthProviderIndividualId > HealthProviderIndividual.HealthProviderIndividualId • HealthProviderOrganisationNetworkId > HealthProviderOrganisationNetwork.HealthProviderOrganisationNetworkId <p>HpiiStatus.HpiiStatusId > HpiiStatusId</p>
6627	DbUpgrade: Ensure DbUpgrade creates & uses SchemaVersions table in dbo schema	<p>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.</p>
7307	HIPS-UI: Provide capability for administrative user to reset IHI assigned to patient	<p>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).</p>

ADO ID	Summary	Change description
7765	Validation of remaining fields in HL7 ORU messages	<p>HL7 ORU_R01 messages submitted to HIPS Core via the IPathologyImagingService and IPathologyImagingServiceV2 interfaces are now subjected to additional validation measures:</p> <ul style="list-style-type: none"> • 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. <p>All validation failures are now notified via an InvalidRequestFault rather than via a ServiceOperationFault.</p>
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.
8255	Align HL7 processing with the standard for use of nulls	<p>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.</p>

ADO ID	Summary	Change description
8619	Validation of fields in ADT messages	<p>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.</p> <ul style="list-style-type: none"> • 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. <p>The following additional validation categories specifically apply to ADT messages:</p> <ul style="list-style-type: none"> • 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. <p>Merge – messages missing mandatory data are rejected.</p>
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.

ADO ID	Summary	Change description
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.
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.

ADO ID	Summary	Change description
9317	Change the current "Advance Care Directive Custodian details are available" indicator on the Patient Summary screen to also include ACP documents	<p>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'.</p> <p>The style of this button can be customised by the site by modifying the following settings in the HIPS UI hips.Settings table:</p> <ul style="list-style-type: none"> '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	<p>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:</p> <ol style="list-style-type: none"> 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. <p>The <i>Module Guide (UI)</i> 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 <i>PatientsWithoutIhiDaysDischarged</i> days, and patients who are on the current user's list of pinned patients.</p> <ul style="list-style-type: none"> • 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. <p>The Other Alerts tab shows patients of any age with any other alerts or non-Active IHI status.</p>

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 Príncipe, 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	<p>See ADO 10796 for details.</p> <p>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.</p> <p>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.</p>
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.

HIPS 7.2.4

ADO ID	Summary	Change description
12939	Add resilience for database timeouts after upload	<p>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.</p> <p>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.</p>

ADO ID	Summary	Change description
13410	Backport ClinicalDocumentVersionGet stored procedure for performance reasons	An optimised version of the ClinicalDocumentVersionGet stored procedure, originally added to HIPS 7.3, has been incorporated into this patch for performance reasons.
13463	Support specifying the Active Directory container in configuration	<p>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.</p> <p>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.</p>

HIPS 7.2.3

ADO ID	Summary	Change description
12863	HIPS 7.2 "Advance Care Directive Custodian details are available" opens document view in new page	The button "Advance Care Directive Custodian details are available" now correctly opens the Advance Care Directive Custodian document in a modal document view within the same window.
12903	HIPS 7.2 Javascript error in modern browsers 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 various issues when HIPS UI is embedded in a frame inside another website in modern browsers. Issues included broken print buttons, users being directed to non embedded views, and inability to open documents in modals.

HIPS 7.2.2

ID	Summary	Change description
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.
10733	HIPS UI Remove Document tooltip still appear after click View Document/Remove Document button	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 disappear 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.
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.

HIPS 7.2.1

ID	Summary	Change description
10073	Patients without IHI not appearing in the Patients without IHI list in HIPS UI	<p>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:</p> <ol style="list-style-type: none"> 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. <p>The <i>Module Guide (UI)</i> 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 <i>PatientsWithoutIhiDaysDischarged</i> days, and patients who are on the current user's list of pinned patients.</p> <ul style="list-style-type: none"> • 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.

HIPS 7.2

ID	Summary	Change description
EHISC-1	Support for Assisted Registration Addendum v1.1	HIPS now supports assisted registration of dependants where the child is not on the same Medicare card as the parent/authorised representative by allowing the healthcare provider organisation to indicate that it supports the parent/authorised representative's assertion of parental responsibility for the child. NOTE: We are aware that some sites have a practice of entering the mother's Medicare number on the newborn's record in their Patient Administration System. This practice is incompatible with Assisted Registration because the My Health Record system will return an error that there is no relationship known to Medicare between the adult and child. Instead, sites should omit the Medicare number on the newborn's record in their Patient Administration System until the correct Medicare number for the child has been advised.
EHISC-15	IHI search by address	HIPS Core has been modified to support IHI Search by Australian Unstructured Address and International Address. The Patient Merging Profile document has also been renamed Patient Administration Processing Guide to better reflect its purpose. Refer to the Patient Administration Processing Guide for details of the processing logic for IHI lookups including search by address.
EHISC-207	Test Pathology Report and Diagnostic Imaging views with up to 10000 records	HIPS UI Pathology Report and Diagnostic Imaging Report Views have been tested and confirmed to work with up to 10000 records if this is supported by the My Health Record system. This was tested using a mock My Health Record environment rather than Software Vendor Test (SVT).
EHISC-208	UI Pathology Report and Diagnostic Imaging views count of items in collapsed view	HIPS UI has been modified to show the number of items for collapsed Pathology and Diagnostic Imaging View when the Group results by organisation names option is checked.
EHISC-255	Login page password-guessing attack	HIPS UI now has the option to configure and enforce account lockout for user accounts that exceed a number of failed login attempts within a period of time. The number of retries, attempt window and length of lock-out are also configurable. A HIPS UI admin screen is available to release accounts that are locked.
EHISC-272	Prevent inclusion of IHIs in URLs	HIPS UI has been modified to prevent the inclusion of IHIs in any URLs.
EHISC-361	Advanced search to allow search by formatted IHI and Medicare numbers by removing typed or pasted non-numeric characters	Advanced search has been made more user friendly by allowing users to enter IHI and Medicare numbers in various formats.

ID	Summary	Change description
EHISC-363	Advanced Search - Ward label should be renamed Location (Ward/Department) to allow for outpatients	HIPS UI Advanced Search page has been modified to display a new label for Ward field "Ward/Department".
EHISC-369	Requested Changes to Emergency Access	HIPS UI has been modified to encourage and support appropriate use of the Gain Access and Emergency Access functions. The presentation of the emergency access text has been altered to make it more easily digestible, and also to reflect that the clause relating to a threat to public safety is not bound up with the clause relating to when the patient's consent cannot be obtained. The emergency access button has been highlighted to give extra significance, through use of the red colour, such that a user pays more attention before just clicking the button. The screen has a new button to cancel the gain access function, as having an obvious button to back out may reduce the likelihood of accidental emergency access. Finally, the Gain Access button has been renamed to Change Access so that it seems less like a required function for the user. Refer to related 475 for additional changes to emergency access.
EHISC-454	Allow clicking on patient name to view the My Health Record	In HIPS UI in the main patient list, users are now able to click on the patient's name to see the patient's My Health record page if they have a valid IHI.
EHISC-469	Pathology Results HL7v2 Profile - Patient Identifier List	The Pathology HL7v2 Profile documentation was updated with more detail on the patient identifier list requirements.
EHISC-470	Allow HIPS to upload documents signed by CSP certificate	HIPS now supports the configuration of health provider organisations to use either a HPO or CSP certificate to digitally sign CDA packages. The main benefit is for sites who have multiple healthcare provider organisations (HPI-Os) using one instance of HIPS, that instead of using multiple HPI-O certificates, sites can use a single CSP certificate.
EHISC-472	Persist log context information throughout processing of each operation	HIPS Core has been modified to persist its logging context throughout the processing of a message to provide richer and more meaningful log outputs.
EHISC-475	"Are you sure?" pop-up for emergency access button	In HIPS UI the gain emergency access button now prompts the user for confirmation of the action with a pop-up before providing emergency access. The pop-up can optionally show an organisational policy if configured in the HIPS UI settings. This change has been made in response to concerns from sites that have experienced accidental cases of clinicians gaining emergency access.
EHISC-476	HIPS should enforce complete dates and no fractional seconds for OBR-7 in HL7 ORU messages	HIPS will now return a validation error if a partial date or a date with fractional seconds is provided in OBR-7 for HL7 ORU messages.

ID	Summary	Change description
EHISC-480	HIPS-UI patient lists should accurately show episode type and location for discharged patients	HIPS UI has been modified to display discharged patients in all lists with their Episode Type as "Inpatient" and their Location as "Discharged" to more obviously indicate the patient was an inpatient but has since been discharged.
EHISC-494	Advanced search - allow single name search on given name field	HIPS now supports the use of a full text index when searching for patients by given name. This enables clinicians to use any given name in the HIPS UI Advanced Search given name field to find patients with multiple given names. This functionality can be enabled if the SQL Server Database Engine optional component "Full-Text Search" is installed.
EHISC-495	Advanced search - format explanation for DOB field	The Advanced Search page in HIPS-UI has been modified to provide a more useful label for the date of birth field, including direction on the date format accepted by the field.
EHISC-498	Support for UC.011 Newborn IHI	An authorised user of HIPS UI can create a verified IHI for a newborn who is less than or equal to 14 calendar days of age at the time of processing. After successful creation of an IHI for a newborn, the user, if authorised, may proceed to Assisted Registration to create a My Health Record for the newborn.
EHISC-499	Log correlation identifier	Previously in HIPS Core, relating error messages and audit records to each other was difficult and not 100% accurate. HIPS Core has now been modified to log all ConsentAudit, DisclosureAudit, HL7MessageLog, HpiiLookupAudit, IhiCreationAudit, IhiLookupAlert, IhiLookupAudit, MessageQueue, PcehrAudit, RemoveAudit, SystemInteractionLog, SystemErrorLog and SystemEventLog records with a CorrelationId unique to the operation. This will enable sites to accurately identify related errors, events and audit records that are logged during a single operation.

ID	Summary	Change description
EHISC-516	Improving rendering of Medicines View attachments	<p>For users of HIPS UI viewing the My Health Record, links from documents, such as to PDF attachments, will display in the existing modal window rather than in a new tab. The rendering of the Medicines view in the Medicines view tab has been improved so that it handles links from the Medicines View, or a sorted version of the Medicines View as follows:</p> <ol style="list-style-type: none"> <li data-bbox="708 533 1353 725">1 Links to HTML attachments whose name contains "Sorted.html" are other versions of the Medicines View sorted by medicine (MedicineSorted.html) or sorted by date (DateSorted.html). They will open in the existing tab, replacing the displayed Medicines View document. <li data-bbox="708 745 1353 1003">2 Links to other HTML attachments are pre-rendered CDA documents which may contain medicines information. They will each open in a modal window. They can be shared or printed from the modal window. Where they have their own PDF or TIFF attachments, these attachments will open in the existing modal window, replacing the displayed CDA Document. <li data-bbox="708 1023 1353 1144">3 Links to a PDF attachment such as the help information for the Medicines View will open in a modal window. They can be shared or printed from the modal window.
EHISC-525	Evaluate impact of disabling TLS 1.0 & TLS 1.1	The HIPS installation documentation has been updated to include a best practice security recommendation for disabling TLS 1.0 and TLS 1.1 on the HIPS Servers.
EHISC-536	Core should validate the length of the IHI property in the search request	In HIPS UI on the advanced search page, searching by IHI now removes the spaces and trims the entered IHI numbers to 16 characters before sending the request to make searching easier for users.
EHISC-545	Automate creation of service catalogue based on WSDL as part of build process	<p>The HIPS Service Catalogue (Core) document has been replaced by documentation of the corresponding HIPS Core web service client proxy API. The new HTML-based documentation provides more accurate information on the interfaces supplied by the HIPS Core web services, and can be viewed from the filesystem or hosted. It also includes information to assist consumers use and apply the documentation when evaluating, designing, building or supporting interactions with the HIPS Core web services. NOTE: The new documentation is best viewed in a modern web browser such as Chrome, Firefox, Safari or Edge. While it can be viewed in Internet Explorer, some features such as the dynamic table of contents and navigation menus will be unavailable.</p>

ID	Summary	Change description
EHISC-582	HIPS should not upload documents using stub episodes that belong to a different document set ID	<p>HIPS Core business logic to retrieve the episode for a specific document CDA Set ID has been modified to ensure that HIPS supersedes the previous version of an uploaded document when a document with the same CDA Set ID is sent to the Upload or Supersede Document web service. This eliminates a defect where HIPS would occasionally upload amended documents as a new document rather than superseding the previous version of the document. If there are multiple documents with the same CDA Set ID already uploaded as separate documents, HIPS will reject the attempt to upload an amended document with that CDA Set ID.</p> <p>HIPS Core business logic to retrieve the episode for a Level 1A Discharge Summary document for a given admission date/time has also been modified to ensure that HIPS supersedes the previous version of an uploaded discharge summary if there is one discharge summary uploaded on an episode belonging to the specified patient where the admission date/time is within one minute of the given date/time. If there are multiple discharge summaries uploaded on episodes for the patient whose admission date/time is within one minute of the given date/time, HIPS will return an InvalidEpisode error: "HIPS is unable to supersede the Level 1A discharge summary because there are multiple discharge summaries uploaded for this patient with the given admission date/time."</p>
EHISC-585	Create an OID in the database for PSML v1.1.1	Pharmacist Shared Medicines List v1.1.1 has been added to the HIPS Core hips.DocumentFormat table to enable support of uploading PSML CDA documents once this functionality has been once released to the My Health Record system.
EHISC-599	QueueConsumer RemoveOnSuccess setting not working as expected	HIPS Core queue consumers now remove successfully processed messages from the HIPS Core database by default.
EHISC-601	Authorised Representative dropping the month from dob	For an assisted registration, HIPS Core now correctly records the authorised representative's date of birth (including month) in the hips.PcehrAudit table.
EHISC-621	Emergency episodes displaying for Upload DS for admitted day only	This enhancement to HIPS UI will allow discharge summaries to be uploaded for non-inpatient episode types by including episodes on the episode list for a configured number of days after service. The new DischargeSummaryEpisodeDaysAfterService and DischargeSummaryPatientDaysAfterService settings can be modified in the hipsui.Setting table. The default values are both set to 365.

ID	Summary	Change description
EHISC-652	Alert Monitor does not handle application server disk errors well	The AppDiskSpace alert item logic has been made more reliable and will no longer log an unhandled exception when the service account does not have appropriate permissions to read the disk properties.
ADO-9515	Ensure Foreign Key Constraint for VisitorHospitalId column in HealthProviderOrganisation table	In HIPS Core a new foreign key constraint has been added to the VisitorHospitalId column in the hips.HealthProviderOrganisation table to ensure referential integrity of data.
ADO-9413	HIPS unable to process HL7 messages/create CDA document when gender is 'U'	HIPS will now correctly map the patient sex value "Not Stated or Inadequately Described", which can be represented by the HL7 code "U", into the corresponding "Not Stated" value in the CDA documents generated by the Upload Discharge Summary Level 1A service and the pathology and imaging HL7 to CDA adapter.
ADO-9536	DOB in advanced search on Chrome and Firefox is taking a day off the patient's date of birth	HIPS UI has been modified to convert the date/time value from server side by verifying if timezone is provided. It will convert the date/time value to be displayed in UI according to the timezone if it is supplied or without the timezone if it is not supplied.
ADO-9622	Document creation date is not accurate	HIPS Core PCEHRService Get Document List web services have been modified to correctly interpret and return the creationTime, serviceStartTime and serviceStopTime dates from the My Health Record system ITI-18 Registry Stored Query operation as UTC time rather than returning the date/time with an unspecified time zone.
ADO-9650	Exception in GetValidatedIhi operation when HI Service error description is less than 500 characters in length	HIPS Core IHIService GetValidatedIhi web service has been modified such that when an error is received from the HI Service, the full error message detail is logged, and not just a portion of it.

HIPS 7.1.4

ADO ID	Summary	Change description
12895	HIPS 7.1 "Advance Care Directive Custodian details are available" opens document view in new page	The button "Advance Care Directive Custodian details are available" now correctly opens the Advance Care Directive Custodian document in a modal document view within the same window.
12902	HIPS 7.1 Javascript error in modern browsers 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 various issues when HIPS UI is embedded in a frame inside another website in modern browsers. Issues included broken print buttons, users being directed to non embedded views, and inability to open documents in modals.

12938	Add resilience for database timeouts after upload	<p>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.</p> <p>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.</p>
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HIPS 7.1.3

ID	Summary	Change description
EHISC-516	Improving rendering of Medicines View attachments	<p>For users of HIPS UI viewing the My Health Record, links from documents, such as to PDF attachments, will display in the existing modal window rather than in a new tab. The rendering of the Medicines view in the Medicines view tab has been improved so that it handles links from the Medicines View, or a sorted version of the Medicines View as follows:</p> <ol style="list-style-type: none"> 1. Links to HTML attachments whose name contains "Sorted.html" are other versions of the Medicines View sorted by medicine (MedicineSorted.html) or sorted by date (DateSorted.html). They will open in the existing tab, replacing the displayed Medicines View document. 2. Links to other HTML attachments are pre-rendered CDA documents which may contain medicines information. They will each open in a modal window. They can be shared or printed from the modal window. Where they have their own PDF or TIFF attachments, these attachments will open in the existing modal window, replacing the displayed CDA Document. 3. Links to a PDF attachment such as the help information for the Medicines View will open in a modal window. They can be shared or printed from the modal window.

HIPS 7.1.2

ID	Summary	Change description
10796	Add user's name to ID field in HI Service requests for auditing	<p>HIPS Core has been modified to include the user's name in requests to the HI Service to ensure sufficient information is provided in a request to identify a user. Previously the request only included a user ID, which depending on the site, may not include the user's real name. This change means sites are not required to maintain audit data for 7 years after the employee ceases to be authorised because the employee is identifiable from the HI Service.</p>

HIPS 7.1.1

ID	Summary	Change description
EHISC-278	GUID seen in place of patient MRN in embedded views.	In HIPS UI the Embedded pages and Patient Summary page has been modified to display an IHI in place of an MRN if the pattern matches a HIPS generated GUID format.
EHISC-504	Change Advanced Search "View Episode" action help text to "Enter Discharge Summary".	Advanced Search has been modified to display "Enter Discharge Summary" helper text instead of "View Episode" for the Discharge Summary action help text.
EHISC-505	Advanced Search action icons should be unique.	Advanced Search has been modified to each use a unique icon for each action.
EHISC-518	Session timeout resulting in double login being required.	On occasion after a session timeout a user would be forced to re-login twice. This double login no longer occurs.
EHISC-519	HIPS incorrectly rejects ORU message when ReportID is present and OBX 3.4 is not provided and also when ReportID is not present and OBX-3.4 is empty string.	HIPS will now check if OBX-3.4 is null or empty before it proceeds to validate Report ID vs OBX-3.4 or Accession ID vs OBX-3.4.
EHISC-520	UI.HideLogoutLink should hide logout link only in embedded view.	The UI.HideLogoutLink setting now only affects embedded view. When the hide logout link setting is enabled, normal users can log out of the application, while embedded users can simply close the window.
EHISC-521	Rename "Remove Documents" feature to "View and Remove Uploaded Documents".	Menu items on the top menu bar and bottom menu of HIPS UI screens updated to show "View and Remove Uploaded Documents" instead of "Remove Documents". Action tooltip in Advanced Search results shows "View and Remove Uploaded Documents" instead of "Remove Documents". "Remove Document" page has been renamed "View and Remove Uploaded Documents".
EHISC-522	ADT message with only first and last name should not return an error.	HIPS now accepts ADT messages with PID-5 Patient Name that contains only a family name and first given name like FAMILY^FIRST . All components of Patient Name are now optional, however at least a family name and one given name is required to search for an IHI.
EHISC-524	Demo Harness showed an error after submitting a PAS message.	Demo Harness can now submit ADT messages and show IHI lookup audits without error.

ID	Summary	Change description
EHISC-529	Patient Summary screen is displayed as a landing page while switching between health services.	<p>HIPS UI now showing facility name as read only text and add a new clickable text "Select Facility" to allow user to change facility. "Select Facility" will only appear when the user is on pages that are not patient specific.</p> <p>Pages allow user to select facility:</p> <ul style="list-style-type: none"> Home/Index DataIntegrity/Patients DataIntegrity/PatientsWithoutIhiView DataIntegrity/DuplicatePatientsView DataIntegrity/OtherAlertsView DataIntegrity/OverriddenDemographics HpiiSearch/SearchById HpiiSearch/SearchByDemographics AssistedRegistration/Unregistered DisclosureManagement/Patients PcehrView/Patients PcehrView/Lookup ConsentManagement/Patients DocumentManagement/Patients DocumentUpload/Patients Patient/AdvancedSearch
EHISC-530	DB Update breaks Availability Group.	HIPS deployment documentation has been updated to provide guidance on deploying HIPS databases in a clustered SQL Server environment.
EHISC-532	Document how to protect HIPS UI against BREACH Attack.	Documentation has been added to the Initial and Clean Installation Guide (UI) with a recommendation and guidance on how to protect HIPS UI from the BREACH attack vulnerability.
EHISC-534	Review and update Module Guides with 7.1 functionality.	Module Guides for Core and UI have been reviewed to find and update any information that was out-of-date with respect to HIPS 7.1 functionality.
EHISC-537	FailureReason not being populated in HL7MessageLog for Path/DI Uploads.	HIPS Core has been modified to log a failure reason in HL7MessageLog for HL7 ORU Pathology and Diagnostic Imaging uploads when an error occurs.
EHISC-538	CDA validation of partial dates and fractional seconds in Specimen Collection Date and Imaging Date.	HIPS will now fail document upload queue operations with a validation error if a partial date or a date with fractional seconds is found in the creationTime, serviceStartTime and serviceStopTime metadata in upload requests, including but not limited to the specimen collection date for pathology reports, and the imaging date for diagnostic imaging reports.
EHISC-543	Sorting on 'View My Health record' column on PcehrView/Patients page hides all the 'View My Health Record' icons.	In HIPS UI the sorting option has been removed from the Action column on the View My Health Record page.

ID	Summary	Change description
EHISC-544	Review and update Service Catalogue (Core) to add missing information about queue query services.	The Service Catalogue (Core) documents the web service operations and all data types used in the requests and responses for the queue query services added to IPcehrServiceV3 in HIPS 7.0.
EHISC-546	Missing Medicare/DVA in ORU messages were aborted by HIPS but QueueStatusId is still 1.	A missing Medicare/DVA in HL7 ORU caused messages to be marked as pending and get stuck in the queue. HIPS will now correctly mark the messages as failed on the queue.
EHISC-548	Invalid DOB in ORU messages were aborted by HIPS but QueueStatusId is still 1.	An invalid DOB in HL7 ORU caused messages to be marked as pending and get stuck in the queue. HIPS will now correctly mark the messages as failed on the queue.
EHISC-549	HL7 ORU validation of partial dates and fractional seconds in Specimen Collection Date and Imaging Date.	HIPS will now return a validation error if a partial date or a date with fractional seconds is provided in OBR-7 for HL7 ORU messages.
EHISC-550	Overridden Demographics documentation.	Documentation for Overridden Demographics functionality has been improved in the Module Guide for HIPS UI.
EHISC-553	Error window observed while clicking 'Continue' on the session logout window.	Users of HIPS UI now see a friendly message that informs them of the need to log out if they click Continue on the session timeout warning after the session has already ended.
EHISC-554	Change PSML template.	Updated the default document code in the HIPS Core hips.DocumentFormat table for Pharmacist Shared Medicines List to 1.2.36.1.2001.1006.1.237.1.
EHISC-564	Failed Gain Access causes exception when representing hospital has not been set.	HIPS UI will now display a suitable error when a user with no representing hospital attempts to Gain Access to a patient's My Health Record.
EHISC-567 / EHISC-568	Sundry issues with Monitoring Tool.	The following issues with the HIPS Monitoring Tool have been resolved: The Monitoring Tool showed an incorrect pending item count. For large databases, a timeout-related error may have been displayed when attempting to save a document that failed to upload.
EHISC-578	Poor System Interaction Log query performance when joining based on metadata.	Improves performance of queries joining audit and system interaction log data in the HIPS Core database by establishing foreign key relationships between audit and system interaction log tables.
EHISC-579	UI should show patient summary after gaining emergency access for patient with RAC.	Previously the behaviour of the IsPcehrAdvertised service would use a locally cached result if it was last retrieved within the configured period. The service has been modified to always use the My Health Record system. The IsPcehrAdvertisedLocal service should be used to retrieve a cached version instead.
EHISC-580	Module Guide (Core) should describe how setting PcehrExistsReuseIntervalMinutes affects each HIPS Core web service.	The Module Guide (Core) has been updated to describe how the PcehrExistsReuseIntervalMinutes settings affects each HIPS Core web service.

ID	Summary	Change description
EHISC-581	Log off security issue with HIPS.	HIPS UI, to the extent possible, prevents client-side caching of data, by setting “no cache” headers to be respected by web browser clients.
EHISC-398	Deployment enhancements.	<p>Enhancements to the installation improvements introduced previously by 398 Scripted installation, including:</p> <p>Replacing component installation switches with an enumerated list</p> <p>Ensuring installation of prerequisites based on requirements of specified components</p> <p>Simplifying & standardising PowerShell file naming across HIPS products</p> <p>All HIPS product documentation has been updated to reflect these enhancements.</p>

HIPS 7.1.0

ID	Summary	Change description
EHISC-227	UploadDischargeSummaryLevel1A validation fault does not show target location.	Previously UploadDischargeSummaryLevel1A validation faults did not show the detail require to resolve the validation issue. HIPS has been modified to include this important detail.
EHISC-228	Wrong error message for invalid document ID.	<p>Previously an invalid CDA document ID sent to the UploadOrSupersedeDocument service would incorrectly return an error indicating the document type code was unknown to HIPS.</p> <p>HIPS will now return an appropriate error message in the response indicating the document ID is invalid.</p>
EHISC-229	Database error when patient given name not supplied in ORU message.	<p>Previously a HL7 ORU message submitted to HIPS without a given name would cause a database error.</p> <p>HIPS has been modified to immediately return a validation error in the response indicating that a given name and family name are required.</p>
EHISC-230	Precision and time zone offset of date/time in HL7 not preserved in CDA.	HIPS Core has been modified to preserve the original precision indication (year, month, day, hour, minute, second or fractional seconds & time zone) of date/time value in a pathology or diagnostic imaging report HL7 message. See also 476.
EHISC-234	Browser gets stuck in a redirect loop when user not assigned to any healthcare facilities.	<p>Previously if a user of HIPS-UI was not assigned to any healthcare facilities they would be shown an error message upon first log in, but if they attempted to access any screens requiring a healthcare facility, their session would enter an infinite redirect loop, resulting in an unusable session.</p> <p>This behaviour has been corrected such that any attempt to access a screen requiring a healthcare facility displays a similar error message and does not result in an unusable session.</p>

ID	Summary	Change description
EHISC-236	Drop-down menu in the top right of the HIPS UI stand-alone header displays off the right edge at 1024x768 resolution.	Previously in HIPS UI, the user preference drop-down menu was displayed off screen at 1024x768 resolution. HIPS UI has been modified to ensure the user preference menu is visible at all supported resolutions.
EHISC-275	Direct access to Remove Document screen.	Previously in HIPS UI, pressing “Trash Can” icon to remove the document firstly displays the document. The user then has to press the “Remove” button to navigate to the Remove screen. HIPS UI has been modified to navigate directly to the Remove screen when user presses the “Trash Can” icon.
EHISC-277	HIPS UI Login Failure after session expires in High Availability configuration.	New configuration is added to handle session in an environment with multiple load-balanced HIPS UI servers.
EHISC-324	Background clean-up process fails when Healthcare Identifiers (HI) Service Certificate not configured.	Previously sites that had not configured HIPS to interact with the HI Service would have errors logged by the background IHI and My Health Record lookup retry process after activating the DatabaseLoaderService. This behaviour has been corrected and HIPS will now respect the BypassHIService flag when the background process runs.
EHISC-326	Include patients with unusable IHI in the "Patients missing an IHI" function.	Previously in HIPS UI, 'Patients Missing IHI' screen only shows patients where HIPS has never found an IHI, but not patients whose IHI is currently unusable because of an outstanding alert. HIPS UI has been modified to show the patients in three separate tabs (Patients without IHI, Duplicate Patients & Other IHI Alert).
EHISC-329	Invalid UUID to OID conversion in DocumentUploadInvoker and DocumentRemovalInvoker when in document id format UUID^extension.	Previously HIPS would accept and attempt to process document supersede or remove operations where the document identifier consisted of both a root and extension and the root was a UUID. This document identifier form is not accepted by the My Health Record system. HIPS now rejects such requests.
EHISC-330	New document format codes not inserted during upgrade if DocumentFormatId already used.	Resolves an issue that may be experienced by sites with a previously installed version when attempting to upgrade the HIPS-Core database.
EHISC-331	Unable to upload Level 1A Discharge Summary for a duplicate resolved IHI.	Resolves an issue where an IHI marked as duplicate was not being validated prior to CDA document creation. Validation after document creation replaced a resolved IHI with a new active IHI and that did not match the IHI in the document.
EHISC-332	Duplicate document uploads do not produce an error.	Resolves an issue where an attempted document upload for a patient marked as a potential duplicate did not result in an error being logged by HIPS.

ID	Summary	Change description
EHISC-333	Compulsory fields of HPI-I Search and the Discharge Summary page.	<p>Improved HIPS-UI with client-side validation on the following pages:</p> <p>HPI-I Search: If the user selects the Australian Address section to enter as search criteria, the Suburb, State and Postcode fields are now required. If the user selects the International Address section, the Country field is required.</p> <p>Discharge Summary: When creating a discharge summary and the Document Format Code setting indicates provision of an HPI-I is enforced, the HPI-I fields are now required.</p>
EHISC-335	An unrelated error is returned when creating a CDA document if the required types of ContactMethod are not in the [hips].[Contact] table for the related facility.	<p>Previously HIPS would return an unrelated error when creating a CDA document if contact information for the related facility was unavailable.</p> <p>This has been corrected as follows:</p> <p>A Diagnostic Imaging report can now be created if contact information is unavailable.</p> <p>An attempt to create a Pathology report or Discharge Summary when required contact information is unavailable will result in an appropriately descriptive error message being returned.</p>
EHISC-358	Put facility code next to MRN on View Patient Summary page.	In HIPS UI, the facility code is now displayed after the patient's MRN on the View My Health Record page to improve contextual information.
EHISC-359	Change action hover text to 'View My Health Record'.	In HIPS UI, the action hover text for viewing a patient's My Health Record from both the Patient List and Advanced Search pages has been changed from the internal name "View Patient Summary" to "View My Health Record".
EHISC-360	Not specified and All Facilities should not be both available in Advanced Search.	Previously users had access to 'All Facilities' and 'not specified', however, now access is limited to search only all 'facilities' in order not to have access to unauthorised facilities.
EHISC-362	Advanced Search should require a minimum set of criteria to avoid matching too many patients.	<p>Previously in HIPS UI, Advanced Search only required the user to provide any one field of the search criteria. This may return a very large result set.</p> <p>HIPS UI has been modified to enforce one of the following key criteria is provided:</p> <ul style="list-style-type: none"> Given names Family name MRN IHI Enterprise ID Medicare Number DVA Number DOB
EHISC-364	Advanced Search - Show episode date and relevant details to help identify episodes.	The Advanced Search results now allow the user to view additional details of an episode by expanding each row.

ID	Summary	Change description
EHISC-368	Allow reusing the Filler Order Number to upload a report to a different patient record after Incorrect Identity removal, and realign Report ID and Accession ID.	<p>Previously in HIPS Core, the filler order number of a removed document is retained, and the same filler order number is not allowed to be uploaded again to a different patient record.</p> <p>HIPS Core has been modified to delete the filler order number when a document is removed with “Incorrect Identity” reason, which allows the document to be re-uploaded to the correct patient record.</p> <p>Additionally, the methods of providing the Report ID and Accession ID have been realigned for consistency between pathology and imaging.</p> <p>HIPS will now use the Report ID if specified in OBX-3.4 of Pathology messages, no matter whether there is one or multiple OBR segments.</p> <p>HIPS will now allow the Accession ID to be provided in the UploadOrRemoveImaging SOAP request and supports using OBX-3.4 for specifying the Accession ID for imaging, like the Report ID is for pathology.</p> <p>HIPS maps Report ID/Accession ID in the following hierarchy: SOAP Report ID/Accession ID OBX3.4 Observation ID Alternate ID from the OBX whose with the PDF OBR3.1 Filler Order Number, if the same in all OBRs, otherwise return a validation error</p>
EHISC-371	HIPS is sending incorrect information to ESB for Refresh Participation status request.	<p>Previously HIPS would send the doesPCEHRExist request to the My Health Record system using the HPI-O of the disclosure facility and not the HPI-O of requesting facility. This caused the result to be stored in the hips.HealthProviderOrganisationPatient table with the HealthProviderOrganisationId for disclosure facility and not for requesting facility.</p> <p>HIPS will now perform IHI validation using the requesting facility not the disclosure facility and store the result against the requesting facility in the [hips].[HealthProviderOrganisationPatient] table.</p>
EHISC-372	Upload ACK message for HPI-I not found error message formatting.	<p>Previously HPI-I errors returned in an upload ACK message contained irrelevant and duplicate details.</p> <p>The error has been modified to be more relevant, and the HPI-I has been added to the log properties, of the HL7Reports log file.</p>
EHISC-374	HL7MessageLog HospitalId is null for ADT A36 merge messages.	HospitalId is now recorded in the HL7MessageLog for merge and move messages. Previously these types of messages stored null in this field.
EHISC-376	DBUpgrade 20160627 1611 New DocumentType data deletes DocumentType referenced by ClinicalDocument.	Resolves an issue that may be experienced by sites with a previously installed version when attempting to upgrade the HIPS-Core database.

ID	Summary	Change description
EHISC-377	Merge process does not respect BypassHIService application setting.	<p>Previously sites that had not configured HIPS to interact with the HI Service were unable to process merge messages for duplicate patients due to logic that always attempted IHI lookups against the HI Service.</p> <p>This behaviour has been corrected and HIPS will now respect the BypassHIService flag when merging patients.</p>
EHISC-378	DBUpgrade Update DocumentType table Description should update by Code not ID.	Resolves an issue that may be experienced by sites with a previously installed version when attempting to upgrade the HIPS-Core database.
EHISC-381	HIPS now handles state/province for non-Australian patient addresses in Pathology and Imaging HL7 messages.	<p>Previously HIPS Core ignored State/Province for non-Australian addresses.</p> <p>HIPS Core has been modified to store the State/Province for non-Australian patient addresses and populate this information when creating CDA documents.</p>
EHISC-383	Episode type filters on View My Health Record patient list.	Allows user to filter patient list for various episode types without updating user preferences.
EHISC-395	DBUpgrade script 5.0.0.0 20150924 1635 should move network ID not organisation ID.	<p>Previously the HIPS DB Upgrade tool had a defect which incorrectly copied the HealthProviderOrganisationId in place of the HealthProviderOrganisationNetworkId when moving data from HealthProviderIndividual to HealthProviderIndividualHpil.</p> <p>This script has been modified and now correctly copies the HealthProviderOrganisationNetworkId.</p>
EHISC-396	Paginated tables on screens do not show tooltips on second and subsequent pages of results.	<p>All screens within HIPS-UI now show tooltips on first page and on all subsequent pages on paginated tables.</p> <p>Pages affected: Advanced Search, View My Health Record, Patient Summary, Withdraw Consent, Remove Document, Register Current Patients, Disclose Hidden Record, Discharge Summary.</p>
EHISC-430	Action buttons in UI Remove document page are not always displayed on the same line.	<p>Previously a long report name would cause the action buttons to wrap onto a second line.</p> <p>HIPS UI has been modified to allow enough space in the Action column to avoid wrapping of buttons.</p>
EHISC-431	HIPS-UI: Different login methods may result in different user details being audited in HIPS-Core for the same user.	<p>Previously HIPS Core stored different user details in the database.</p> <p>HIPS Core has been modified to use standard user details.</p>
EHISC-458	Diagnostic Messages infinite retry loop with invalid Medicare.	<p>Previously HIPS Core had a static configuration for handling HI Service errors and defaulted any unknown errors to be retryable.</p> <p>A new table, [hips].[HiServiceErrorCode], has been added and HIPS logic modified, to enable the addition of new HI Service error codes as they are introduced and control of whether they should be retried or not without the need for code change.</p>

ID	Summary	Change description
EHISC-460	HIPS-UI: Avoid wasteful loading of patient list when viewing patient summary.	The View My Health Record screen in HIPS-UI has been modified to more intelligently retrieve details for the patient being viewed, improving the initial response time for the screen.
EHISC-461	HIPS-UI: Unnecessary retrieval of document list on initial load of patient summary.	The View My Health Record screen in HIPS-UI has been modified to avoid an unnecessary interaction with the My Health Record system to retrieve a list of documents, improving initial response time for the screen and avoiding a wasteful interaction.
EHISC-462	HIPS-UI: Cache additional views.	The View My Health Record screen in HIPS-UI has been modified to enable caching for the following previously uncached views, improving response time for the screen when a user returns to the screen while views are cached: Pathology Report View, Diagnostic Imaging Report View, Health Record Overview View.
EHISC-463	HIPS-UI: Process requests required by Patient Summary in parallel.	The View My Health Record screen in HIPS-UI has been modified to enable concurrent processing of requests for content when displaying the patient summary for a specific patient, improving the initial and total response time for the screen. Further, it is now recommended where possible to configure HIPS-UI for access via HTTP/2 for multiplexing of requests from the browser.
EHISC-465	Support Filler Order Number from multiple LIS and RIS applications and facilities.	Previously HIPS required the Filler Order Number to be unique per instance of HIPS. This was a potential issue for sites with multiple Applications and/or Facilities generating Filler Order Numbers that could conflict. HIPS has been modified to require the combination of Filler Order Number, Sending Application and Sending Facility to uniquely identify a pathology or diagnostic imaging report.
EHISC-467	Wrong namespace in HI error message should be handled gracefully.	The HI B2B Client library that HIPS makes use of to interact with the HI Service contained a defect which did not handle SOAP namespace errors gracefully. A new vendor library was released and updated in HIPS to resolve this defect.
EHISC-477	Validation of Medicare numbers in HL7 ORU messages.	A provided Medicare number in HL7 ORU PID segment will now be validated using the following set of rules: 10 or 11 digits pass the check digit routine the first digit in the range 2 to 6 the 10th digit (issue number) in the range 1 to 9 the 11th digit (IRN), if supplied, in the range 1 to 9
EHISC-478	Patient pinning not scalable for large databases and numbers of users.	The display of patient lists in HIPS UI is more responsive as the number of users increases, due to an enhancement to the patient pinning data model, services and caching strategy.

ID	Summary	Change description
EHISC-488	Contact formatting of 0 causes Path/DI report upload failure.	HIPS will correctly detect Australian mobile numbers and fixed line phone numbers and format them appropriately, while not reformatting invalid phone numbers with spaces.
EHISC-489	Issue with Long MRNs in HIPS UI.	Previously HIPS was not able to load patient with MRN longer than 20 characters. HIPS has been modified to accept MRN with maximum 40 characters.
EHISC-490	Advanced Search: Improved default values.	The following fields on the Advanced Search page in HIPS UI have had their default values set to "Not Specified": In Hospital? With Valid IHI? With My Health Record?

HIPS 7.0.2

ID	Summary	Change description
EHISC-485	Optimisation of the Queued Pcehr Operation view	Corrects the following issues with the QueuedPcehrOperation view introduced in HIPS 7.0.0: 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.

HIPS 7.0.1

ID	Summary	Change description
EHISC-321	Forward to Different Logout Screen Depending on Entry Route	HIPS UI has been modified to keep track how the user is logged in. In HIPS UI standalone mode, a user can log in using a username and password or select the 'Windows' button which will use the currently logged in Windows account to attempt to log in to the HIPS UI. Otherwise, in Embedded mode, HIPS UI is launched from a CIS in patient context and optionally a JWT is passed to HIPS to bypass the login screen. If user is logged in via username & password or selecting the 'Windows' button, when the user logs out or the session times out, HIPS UI will redirect the user to the normal login page as in the image below, and the user will have two options to log back in HIPS UI.

ID	Summary	Change description
EHISC-320	Auto Forward to a Logout Screen	<p>HIPS UI has been modified to detect the duration since the last communication with the server. A new configuration setting will be added to indicate when a timeout warning should be displayed to the user.</p> <p>A timeout warning will be displayed after a given period of no communication with the server. For example, when a user is scrolling through a document, or switching tabs in a page, there is no communication with the server. The timeout warning is to inform the user that they will be logged out in a certain number of hours, minutes and seconds. If the number of hours is zero, the hours component will not be shown. If the number of hours and minutes are zero, then only the seconds component will be shown.</p> <p>The timeout warning allows the user to either continue the session or log out immediately. If continue is selected, the current session will be extended, whilst log out will end the current session and redirect the user to the appropriate logged out screen. In case no action is taken by the user, HIPS UI will automatically redirect the page to the appropriate logged out screen when the timer reaches zero.</p>
EHISC-349	Move Lookup by MRN above table of current patients on View My Health Record page	<p>HIPS UI has been modified to show Lookup By MRN above table of current patients on View My Health Record page.</p> <p>For further information consult the HIPS - Module Guide (UI) document.</p>
EHISC-509	HPI-I Batch Retrieve result not returned in V1 SOAP response	HIPS now returns additional information returned by the HI Service for HPI-I Batch Retrieve operations.
EHISC-510	HPI-I Batch Retrieve result returned in V2 SOAP response does not include service messages	HIPS now returns additional information returned by the HI Service for HPI-I Batch Retrieve operations.
EHISC-464	Extend GetPatientParticipationStatus service operation to return additional information	<p>HIPS now provides the following additional fields as part of the PatientParticipationStatus DTO class of the GetPatientParticipationStatus service:</p> <p>MedicareNumber</p> <p>MedicareInr</p> <p>DvaNumber</p>

HIPS 7.0.0

ID	Summary	Change description
EHISC-99	Make the Medicines View accessible from a tab like other views	<p>The HIPS UI My Health Record View has been modified to provide a 'Medicines View' tab and function and removed from the 'Other Documents' tab. The new function automatically retrieves and renders the CDA document within the frame of the 'Medicines View' tab for ease of view for the user.</p> <p>HIPS Core has also been modified to remove existing documents that are already displayed in their associated tabs from the 'Other Documents' list.</p>
EHISC-110	Database command timeout should be configurable outside of HIPS code	Implementers can now configure the database command timeout for both HIPS Core and HIPS UI via the new configuration setting "Database.CommandTimeout".
EHISC-124	Misleading ValidateIHI error	<p>In previous product versions, in the case where a patient had been registered in the HIPS database with an incorrect and/or invalid DVA number, when a call was subsequently made to the HIPS IhiService/GetValidatedIhi service operation, HIPS was unable to validate the IHI with the national HI Service but returned a misleading response message stating "Retuning a stale IHI because HI service was unavailable" and some minimal IHI information.</p> <p>This behaviour has been modified as follows when the interaction with the HI Service to obtain a validated IHI returns an error and no IHI is available locally:</p> <p>The message contained in the HipsResponse/HipsErrorMessage element states: "An error prevented HIPS from successfully contacting the HI Service to retrieve a validated IHI and no IHI is available locally."</p> <p>The status contained in the HipsResponse/Status element is "HiServiceError", reflecting that the HI Service returned an error that prevented a validated IHI being obtained.</p> <p>Additional information available in the response from the HI Service is populated into the HipsResponse as follows:</p> <p>The ResponseCode is set to the code of the first highest severity service message returned from the HI Service.</p> <p>The ResponseCodeDescription is set to the reason of the first service message returned from the HI Service.</p> <p>The ResponseCodeDetails is set to string constructed from the values of each service message (including any detail elements) returned from the HI Service.</p> <p>The ValidatedIhi element does not contain any values.</p> <p>An appropriate corresponding error is logged to the HIPS System Error Log, including details returned from the HI Service.</p>
EHISC-132	Configuration to allow removal of zero padding for local identifiers	Implementers can now configure via the HIPS Core configuration setting "Mrn.Padding" to how many characters HIPS pads local identifiers (MRNs). The setting supports values between 0 and 40. A post-installation T-SQL script is also provided to migrate data stored for existing local identifiers (MRNs) to a desired state.

ID	Summary	Change description
EHISC-136	HIPS database locks under high load preventing the upload of documents to the MHR	<p>In previous product versions, when HIPS receives a high load of uploads and other requests to be processed HIPS may encounter database locking errors. When these errors were encountered before a document upload request was placed onto the HIPS queue, the error was not handled within HIPS and consequently the uploads fail and it is up to the ESB or source system to handle these errors and attempt to retry the upload.</p> <p>HIPS has been modified to:</p> <p>Support the automatic retry of document uploads when database locking errors are encountered within HIPS before the document is added to the queue for processing.</p> <p>Support the following configuration for retries on database lock error:</p> <p>Number of retries: The number of retries attempts of the operation when a database lock error is encountered before the upload fails. Via the new “DBLockMaximumRetry” configuration setting.</p> <p>Retry delay: The delay in milliseconds between the retry attempt. Via the new “DBLockRetryDelay” configuration setting.</p> <p>Support the logging of the retry for an upload operation for system diagnostic purposes.</p> <p>Add configuration to allow continued support for the existing HIPS function added in v6.1.2 that rejects Pathology and/or Diagnostic Imaging HL7 uploads when an existing HL7 operation for the same patient is in a Pending state. Via the new “PathologyImaging.CheckForPendingMessages” configuration setting.</p>
EHISC-138	Server-side filtering of large datasets before display in HIPS UI	<p>In previous product versions, all existing HIPS UI screens provided patient lists with client-side filtering of results. While this is sufficient when there are a limited number of results, in high-throughput scenarios (such as pathology and radiology providers) with a large number of results, these screens are expected to perform poorly.</p> <p>HIPS UI has been modified to provide an Advanced Search function that can be accessed from the main navigation (dependent on user authorisation). The Advanced Search function supports searching for patients and episodes using a range of criteria. Search results are displayed for any matching patients and episodes, with individual search results providing a set of actions applicable to that result (dependent on user authorisation). Each action navigates to the applicable existing HIPS UI screen for the selected patient and episode.</p> <p>HIPS Core has also been modified to provide a new “patient search” service operation that supports the requirements of the Advanced Search screen.</p>
EHISC-139	Improvements to Stored Procedures	<p>Stored procedures in the HIPS databases that retrieve records (“get” stored procedures) using multiple optional criteria have been modified to utilise dynamic SQL to improve query plan performance.</p>

ID	Summary	Change description
EHISC-140	Improvements to HIPS performance	<p>The following improvements have been made:</p> <p>Introduced the HIPS 7.0 - Topology and Configuration Guide document as part of the HIPS release package documentation</p> <p>Reduced excessive interactions with HI Service to obtain and validate IHI:</p> <p>In previous versions of HIPS, where configured to obtain IHIs itself, HIPS performed an IHI lookup to obtain and validate an IHI from the HI Service for each ADT message received and prior to each interaction with the My Health Record system. HIPS used a sequential set of searches executed against the HI Service using various combinations of patient demographics, ordered in possible likelihood of available demographic data obtaining a valid result. This approach was potentially wasteful, because regardless of whether it was the first or tenth set of search criteria that succeeded, each time HIPS performed an IHI lookup it started from the first search criteria again.</p> <p>HIPS has been modified such that it now stores the most recent previously successful search criteria for some configurable period, such that this search criteria is the first used when a subsequent IHI lookup is requested within the configured period; and that in the case that all available criteria were unable to obtain an IHI this is also stored to prevent a repeated lookup where the criteria have not changed in the configurable period. This is configured via the new configuration setting “IhiSearchCriteriaReuseIntervalMinutes”.</p> <p>Reduced excessive interactions with My Health Record system to determine if My Health Record exists:</p> <p>In previous versions of HIPS, HIPS executed a doesPcehrExist operation against the My Health Record system in the following circumstances:</p> <p>For a new episode or a new HL7 pathology or diagnostic imaging report</p> <p>After it has obtained a valid IHI from the HI Service</p> <p>When the following HIPS services are explicitly invoked: IsPcehrAdvertised, RefreshPatientParticipationStatus</p> <p>HIPS has been modified such that in the case of (a) and (b) it stores the result of a successful doesPCEHRExist invocation for some configurable period, such that when a subsequent request is made within the configured period the locally stored result is used in preference to another interaction with the My Health Record system. This is configured via the new configuration setting “PcehrExistsReuseIntervalMinutes”.</p>
EHISC-141	Include previous custom functionality in standard HIPS product	<p>HIPS has been extended with the following previously custom functionality:</p> <p>IHI Reconciliation report</p> <p>Override Report</p> <p>Disclose hidden record for the root health organisation</p> <p>For further information consult the HIPS 7.0 - Module Guide (Core) and HIPS 7.0 - Module Guide (UI) documents.</p>

ID	Summary	Change description
EHISC-142	High Availability	HIPS is now deployable in the following High Availability configurations: No High Availability High Availability for viewing only High Availability for all functionality For further information consult the HIPS 7.0 - Topology and Configuration Guide.

ID	Summary	Change description
EHISC-144	Reduce audit log size by redesign of audit logs and archiving	<p>HIPS audits interactions with the HI Service and My Health Record System by writing details of each interaction to its database. Each audit record stores contextual information related to the interaction, as well as a complete copy of the request and response message sent during the interaction. Due to the frequency with which HIPS can interact with these remote systems and the data stored in each audit record, over time the size of the HIPS audit logs can grow significantly, impacting data storage requirements and potentially database performance.</p> <p>To address this, the HIPS audit mechanism has been re-analysed to identify the minimum mandatory events and data to be audited for each interaction with the HI Service and My Health Record System. The HIPS audit mechanism has been extended to better separate contextual information from request and response messages, and to enable through configuration when all or only desired events and data are audited.</p> <p>This consists of the following changes:</p> <p>Separate Audit & System Interaction Data. HIPS Core has been modified to utilise a separate table named SystemInteractionLog that provides a generic data structure for storing data about interactions with remote systems such as the HI Service & My Health Record. Contextual audit information continues to be written to the interaction-specific tables (HpiiLookupAudit, lhiLookupAudit, PcehrAudit), while system interaction data is now written to the new SystemInteractionLog table.</p> <p>Capture Minimum Contextual Audit Information. HIPS has historically captured a comprehensive audit trail by auditing all interactions with the HI Service and My Health Record System, and for both, capturing some level of contextual audit information in dedicated fields in its audit log, and then relying on capturing the complete request and response message for the remainder. HIPS has been modified to ensure that all mandatory data items are captured in dedicated fields, making the storing of the full request and response messages optional.</p> <p>Provide Configurability of Auditing Options. The HIPS Core auditing mechanism has been extended to support configurable filtering when recording interactions with the HI Service and My Health Record System. The configuration will affect recording the full request and response message for successful interactions, but will not affect recording the full request and response message for unsuccessful interactions nor the capture of mandatory contextual audit information – these are always captured. This will provide potential benefits to reduced storage for full request and response messages. An implementer can configure filtering for each interaction in the new SystemInteractionLogConfiguration table in the HIPS Core database.</p> <p>Data Migration. The HIPS DbUpgrade command-line utility has been extended to provide a new option to migrate audit data. For further information refer to the HIPS 7.0 - Upgrade Instructions document.</p>

ID	Summary	Change description
EHISC-145	SA Health Viewing Requirements	<p>HIPS UI has been modified to enable viewing the My Health Record across all facilities, including patients that have not yet been admitted into the HIPS database as an inpatient via an ADT feed. Authorised users are now able to register and update details for a patient manually, which can allow a user to subsequently search for a patient and view their My Health Record details.</p> <p>For further information refer to the HIPS 7.0 - Module Guide (UI) document.</p>
EHISC-148	Throttling HIPS upload to My Health Record using a back-off algorithm	<p>HIPS has been extended to:</p> <p>Prevent any attempt to upload a CDA document for which upload has not previously been attempted if the number of CDA documents for which upload is already being retried exceeds a specified maximum number of concurrently retrying operations (via the new “QueueConsumer.MaximumRetrying” configuration setting available for the new HIPS Core Queue Consumer component).</p> <p>Support the ability to automatically increase the period between retry attempts when a CDA document upload operation has failed due to a temporary failure in the previous upload attempt (via the new “QueueConsumer.MessageRetryPolicy”, “QueueConsumer.RetryDelay” and “QueueConsumer.MaximumRetryDelay” configuration settings available for the new HIPS Core Queue Consumer component).</p>
EHISC-149	Centralised logging	<p>All HIPS products now consistently use log4net for configurable logging, including where available identifiers applicable to the context of the message being logged. For further information consult the appendices of the HIPS 7.0 - Initial and Clean Installation Guide (Core) and HIPS 7.0 - Initial and Clean Installation Guide (UI) documents.</p>

ID	Summary	Change description
EHISC-150	Allow document uploads despite detected IHI duplication	<p>In previous product versions, HIPS raised alerts when a duplicate patient or duplicate IHI had been detected. A duplicate patient alert (IHI Status ID 101) occurs when HIPS receives two patients (Patient A and Patient B) admitted to the same health facility with the identical demographics and found to have the same IHI. A duplicate IHI alert (IHI Status ID 100) occurs when it receives two patients (Patient A and Patient B) admitted to the same health facility with slight differences in the demographics but identical IHIs are obtained from the HI service.</p> <p>Once an IHI alert has been raised, the My Health Record could not be accessed, and clinical documents could not be uploaded against the patients' My Health Record until the IHI alert was resolved. The IHI alert status can be resolved after analysing the patients and if found to be the same patient, merging the patient details together to create one patient record for the health facility.</p> <p>For certain implementations of HIPS valid duplication of patients is required and in these cases this logic was blocking the reporting and patient care. Other organisations that do process the merge and resolve the IHI alerts were also blocked until this resolution took place.</p> <p>HIPS has been enhanced to allow all HIPS operations to the My Health Record against patient records when either a duplicate IHI alert or duplicate patient alert exist. The IHI Date Last Validated for duplicate records will be updated to require validation to ensure only the current record is used for the My Health Record access, until other records' IHI is revalidated.</p> <p>The IHI alert status messages have been updated to state the local identifier of all duplicate patients so the system administrators can easily identify which patients have either a duplicate IHI or are duplicate patients.</p> <p>This new functionality has been implemented as a new configuration setting "Ihi.AllowMHRAccessForDuplicates". For backwards compatibility, the default behaviour is to not allow access to the patient's My Health Record until the duplicate IHI or duplicate patient alert has been resolved.</p>
EHISC-151	Require implementers to change default Vendor in web.config	<p>Implementers must now modify the HIPS Core configuration setting "PcehrVendorId" from its default value. If the value is not changed, HIPS Core will log and return an error response for all attempts to interact with its provided web service operations.</p>
EHISC-152	Support for Windows Server 2016 and SQL Server 2016	<p>HIPS components have been tested for use on Windows Server 2016 and SQL Server 2016.</p>
EHISC-153	Update list of temporary and permanent error codes and hold the list in a reference database table for updating by the system administrators	<p>A new table named "PcehrErrorCode" has been introduced to the HIPS Core database. This table contains all codes that may be returned from the My Health Record system, and for each identifies how HIPS interprets the error code. For further information consult the appendices of the HIPS 7.0 - Initial and Clean Installation Guide (Core) document.</p>

ID	Summary	Change description
EHISC-154	Ensure Monitoring tool distributed with version 6.2 functions the same in Version 7.0	The HIPS Monitoring Tool has been updated to ensure it is compatible with the other changes made in the v7.0 release.
EHISC-155	Proactive reporting of alert conditions	<p>A new HIPS System Health Agent has been created as a Windows service that runs in the background alongside HIPS to assist HIPS system administrators in monitoring HIPS is running as expected. The items monitored and their associated thresholds, and frequency of check are configurable to allow for flexibility for each HIPS installation. The monitored items when they become outside of the threshold are alerted via configured logs.</p> <p>For further information consult the appendices of the HIPS 7.0 - Initial and Clean Installation Guide (Core) document.</p>
EHISC-179	Order ID has incorrect organisation HPI-O	<p>For Pathology Report and Diagnostic Imaging Report documents, HIPS now populates the Requester Order ID using the requester's HPI-O, if available. If the requester's HPI-O is not supplied in OBR-16.14.2 then the Requester Order ID will be omitted from the document.</p>
EHISC-185	MSMQ Replacement	<p>With the My Health Record transitioning to an opt-out model and more widespread use of HIPS, the message throughput requirement for HIPS is expected to grow significantly. Since its first release, HIPS has utilised Microsoft Message Queuing (MSMQ) to realise its requirement for a queuing component. Following a review of HIPS queuing a decision was made by the Agency to move HIPS queuing into SQL Server, making MSMQ redundant.</p> <p>MSMQ has been replaced by extending the existing message handling provided by the HIPS database. Separate background processing services to process queued messages are now hosted in one or more Windows services deployed to each application server, connecting to the HIPS Core database to consume messages as they become available. The new queuing mechanism simplifies the HIPS application architecture and better supports scale-out and high availability topologies.</p> <p>For further information on HIPS components and topologies consult the HIPS 7.0 – Topology and Configuration Guide document.</p> <p>For further information on installing and configuring the new HIPS Core Queue Consumer component consult the HIPS 7.0 – Initial and Clean Installation Guide (Core) document.</p> <p>For information on upgrading a previous HIPS version to HIPS 7.0 and impacts arising from the MSMQ replacement consult the HIPS 7.0 – Upgrade Instructions document.</p>
EHISC-332	Duplicate document uploads don't produce an error	When a duplicate patient document fails to upload there is no information logged, it is marked as a failure in the queue.
EHISC-390	Country descriptions	<p>Values in the [Description] column of the [hips].[Country] table in the HIPS Core database have had trailing space characters removed. Descriptions with trailing spaces can cause country matching to fail when using the description rather than Code.</p>

ID	Summary	Change description
EHISC-397	Restructure of release package	<p>The HIPS release package has been restructured as described in the corresponding Product Data Sheet document. The key changes are:</p> <p>Documentation</p> <p>HIPS release documentation is now included in its own ZIP file at the root of the release package, rather than included in both the Binary and Source Code ZIP files.</p> <p>Binary ZIP files</p> <p>Structural & content changes to HIPS-AppServer and HIPS-Web components:</p> <p>The database subfolder contains a “DbUpgrade” executable that can be used by implementers to install or upgrade their database to HIPS 7.0. The executable detects the installed HIPS version and executes all scripts required to ensure the database is at the correct version. The only manual steps required now are to configure & execute any site-specific scripts post the database upgrade.</p> <p>The runtime subfolder contains subfolders for each sub-component, e.g. the “App Server” runtime folder contains subfolders for the Core web services, background processes such as the new queue consumer and alert monitor components, and shared configuration data. This enables the various components to be installed and configured separately if desired, for instance in a scale-out or high availability topology.</p> <p>The setup subfolder contains Windows PowerShell script files and configuration data files that are used to install or remove HIPS runtime components. These automate the majority of the previously manually executed steps to install and configure a HIPS component. The installation and upgrade documentation provided as part of the release package has also been updated to reflect an implementer configuring and executing these scripts rather than manually performing steps.</p> <p>The wsdl subfolder (HIPS-AppServer only) contains all of the exported WSDL files for the built version of the “Core” web services.</p> <p>Source Code ZIP files</p> <p>All required SQL scripts are now included in the source code for each “DbUpgrade” project.</p> <p>We no longer include WSDL in as part of the Source Code package as it is not source code, it corresponds to a built version of the HIPS Core “App Server” and hence is included in the Binary package.</p>
EHISC-398	Scripted installation	<p>Installation of HIPS products has been modified to utilise PowerShell scripting more extensively to make installation more automated and consistent. The following documents now reflect the use of these revised installation scripts:</p> <p>HIPS 7.0 - Initial and Clean Installation Guide (Core)</p> <p>HIPS 7.0 - Initial and Clean Installation Guide (UI)</p> <p>HIPS 7.0 - Upgrade Instructions</p>

ID	Summary	Change description
EHISC-399	Extend size of System Error Log Message & ExceptionMessage columns	The size of the Message and ExceptionMessage columns in the hips.SystemErrorLog table has been modified to be varchar(max) to ensure content is not truncated. Parameters to the associated hips.SystemErrorLogInsert stored procedure have also been modified accordingly.
EHISC-400	Change to behaviour of GetRecentPatientParticipationStatus web service	When a clinical system requests a list of patients who have changed participation status since a certain date via method "GetRecentPatientParticipationStatus", HIPS v7.0 will include all patients for whom the existence of a My Health Record has been checked. Previous versions would only include patients who have been found to have a My Health Record. This change will increase the quantity of records that are returned by the method. If the quantity of records returned is too high, systems that call this method may need to call it more frequently with a smaller date range in order to reduce the quantity of records returned.
EHISC-401	Temporary removal of P2P product	<p>HIPS components previously distributed as part of the "P2P" product should be removed from the HIPS binary and source code packages and all documentation.</p> <p>Key improvements are currently underway to the national infrastructure for provider directories, which are essential for the utilisation of the HIPS P2P functionality.</p> <p>The removal of P2P components from the HIPS product is temporary. They will be reinstated in a future HIPS release, once the necessary national infrastructure service for provider directories are in place.</p>
EHISC-429	Two DoesPcehrExist calls for Pathology and Diagnostic Imaging uploads	Pathology and Diagnostic Imaging uploads both perform an extra DoesPcehrExist call when first loaded.

HIPS 6.2.2

ID	Summary	Change description
EHISC-348	Improve handling of Ninject binding scopes in HIPS UI.	Change to HIPS UI Ninject module to close connections to HIPS Core after each request, supporting more concurrent use of HIPS UI. Regression testing found the change to Ninject does not affect other functions of HIPS UI. (v6.2.2)

HIPS 6.2.1

ID	Summary	Change description
EHISC-8	Wrong reply from HIPS to ESB for consumer PCEHR participation status	HIPS web services now return the correct My Health Record participation status when a patient is admitted to a second facility within 24 hours.

ID	Summary	Change description
EHISC-13	Support for Windows 2012	Documentation has been updated in this version to reflect that HIPS supports Windows Server 2012 R2 and list the Windows feature names applicable to this version in the installation guide.
EHISC-25	Display of pre-admission episodes in UI	New configuration has been added to allow a Health Organisation to display pre-admit episode types on the View My Health Record screen in HIPS Web UI.
EHISC-29	HIPS error messages referring to wrong document types	HIPS services now return errors relating to the correct document type rather than returning errors relating to Discharge Summary when the document in question is of a different type.
EHISC-52	eHISC UI: Registration fails for new patients with only DVA number	HIPS UI now allows assisted registration to create a My Health Record for consumers using a DVA file number rather than a Medicare card number as an identifier.
EHISC-62	Discharge Date not cleared when Cancel Discharge event (A13) received	The ADT interface now clears the stored discharge date when a message containing a Cancel Discharge event is received.
EHISC-63	Disable Login buttons once pressed	The HIPS Web UI now disables the Login button once it has been clicked.
EHISC-64	Improved handling of multiple episodes of care	The episode matching logic is now consistent between the patient list and episode list screens so there is no longer a situation where the HIPS Web UI can display 'Multiple' for episodes of care on the Withdraw Consent screen and then display only one episode on the next screen.
EHISC-65	Missing steps in installation guide	The HIPS Core Installation Guide has been updated to include configuration required for NASH certificate validation.
EHISC-66	XSD filename mismatches in WSDL collection	The files in the WSDL package now reference the correct file names for the other WSDL and XSD files so they import cleanly into SOAP tools.
EHISC-67	Embedded Document Upload dialog not displayed correctly	In the HIPS Web UI, the Level 1A Discharge Summary upload functionality includes a patient list page, episode list page and document upload form. The link from the episode list page to the document upload form now respects the state of the page, whether it is in embedded view or not, and the document upload form is displayed correctly in embedded view.
EHISC-68	New filter to display non-inpatients only	New configuration has been added to allow a Health Organisation to display non-inpatient episode types on the My Health Record View screen in HIPS Web UI.
EHISC-70	Introduce a global configuration flag to prevent issuing of dummy MRNs	A new site-wide configuration option has been added to the HIPS Core to allow a HIPS implementer to disable the creation of a dummy MRN when a validated IHI identifier is used and the patient is not registered in the current facility.

ID	Summary	Change description
EHISC-75	Support for new provider identifier types	HIPS P2P can now add new provider identifier types to the LHSD when an identifier of an unexpected type is encountered in data obtained from NHSD. The size of database columns for provider organisation name and description, provider location description, and street name were increased to accommodate unexpectedly long values in the production data load.
EHISC-76	Alert should be generated when NEPS indicates an HPI-I change	HIPS P2P now includes functionality that revalidates a provider's HPI-I when NEPS indicates a provider's name or HPI-I has changed, and raises an alert if the HPI-I is invalid.
EHISC-77	Original delegate URI should be stored and used for validation	HIPS P2P now stores the original delegate URI of each ELS interaction record and includes the delegate URI in requests to validate the interaction record.
EHISC-78	Patient Merge Issue	The ADT interface now correctly resolves IHI alerts for potential replica patient records when merging a patient without an IHI into a patient with an IHI alert.
EHISC-79	Unable to display SHS with multiple provider phone number within HRO	HIPS Web UI no longer displays an error in the Health Record Overview screen when the author of the latest Shared Health Summary has multiple phone numbers.
EHISC-82	Support for SQL Server 2014	HIPS databases have now been successfully tested on SQL Server 2014 in addition to SQL Server 2008 R2 and SQL Server 2012 that were previously supported.
EHISC-83	Support for SQL Server 2014	The HIPS Web UI layout has been corrected so that the popup that allows registration of a new patient to disclose the existence of a hidden My Health Record now displays within the bounds of the popup window.
EHISC-84	Pathology Report View errors not shown	The HIPS Web UI now shows Pathology Report View errors on the View My Health Record screen.
EHISC-85	Path: Requester Order ID should be left empty if not unique	HIPS Pathology Report upload functionality now leaves the Requester Order ID blank if the Order ID value is not unique across all OBR segments.
EHISC-87	Support for local provider identifiers in generated CDA documents	<p>HIPS Pathology and Diagnostic Imaging functions now support healthcare organisations that are granted an exemption from the requirement to provide the HPI-I of the author and reporting pathologist / radiologist.</p> <p>HIPS services now allow the OID for local provider identifiers to be specified via a mapping table in HIPS so that local provider identifiers can be included in the generated CDA document without the provider's HPI-I needing to be stored into the HIPS provider table first.</p>
EHISC-88	Upload of path/DI documents should return document set ID	A new PCEHRServiceV3 has been added to return the Document Set ID and Admission Date Time when the web services are called to upload or pathology or diagnostic imaging reports. This allows implementers to use the Remove web service to remove pathology or diagnostic imaging reports from the My Health Record.

ID	Summary	Change description
EHISC-89	Bundling of HIPS Monitoring tool	The HIPS Monitoring tool has been included in the HIPS software package. This allows all HIPS implementers to make use of this tool to monitor HIPS.
EHISC-94	New version of clinical document gets uploaded as new document	HIPS services no longer upload amended documents as new documents when the database load being high causes a timeout on the look up of previous document versions.
EHISC-95	EPMI patient information not displayed for patient not registered in target hospital	The Health Record Overview no longer displays an informational message 'Invalid Patient' when attempting to view the embedded view for an enterprise patient ID.
EHISC-100	Path / DI V2 Adapter, Lookup by MRN gets the wrong Patient Master	HIPS pathology and diagnostic imaging upload services now correctly handle messages where patient records with the same MRN exist in multiple healthcare facilities.
EHISC-101	HIPS Pathology V2 Adapter Report ID element	HIPS pathology upload service now supports specifying the Pathology Report ID via mappings from OBR-3 Filler Order Number (when there is one OBR segment) and from OBX-3.4 Alternate Identifier (when there is more than one OBR segment) and from a new "ReportID" parameter.
EHISC-102	HIPS Path & DI V2 Adapter - Patient's Date of Births formatted with zero time	The patient date of birth in pathology and diagnostic imaging reports generated by HIPS no longer includes the specific time of day.
EHISC-103	Employment element nullFlavor="NI" Path & DI V2 Adapter	<p>HIPS pathology and diagnostic imaging upload services no longer include an "asEmployment" element with no "employerOrganization" element when the requesting organisation name is not supplied. For requesting organisation to be populated, the organisation name must be supplied in the requester assigning facility namespace ID subcomponent. The requesting organisation HPI-O may optionally be supplied in the universal ID subcomponent using the OID form of HPI-O and the universal ID type "ISO".</p> <p>For Pathology Report, the asEmployment element is optional and will be omitted entirely when the organisation name is not specified.</p> <p>For Diagnostic Imaging Report, the asEmployment element is mandatory, so the name element at the XPath /ClinicalDocument/participant/associatedEntity/associatedPerson/asEmployment/employerOrganization/asOrganizationPartOf/wholeOrganization/name will have the attribute nullFlavor="UNK" if the organisation name is not specified.</p>
EHISC-104	1A Discharge Summaries to be uploaded without a discharge date	<p>HIPS Core web services now allow a Level 1A Discharge Summary to be created and uploaded by HIPS when a patient discharge date and time is not provided.</p> <p>When the discharge date is not specified, the encounter period will have a low value (admit date) and no high value (discharge date).</p>

ID	Summary	Change description
EHISC-106	Make provider given name optional in HIPS HL7v2 Adapter	HIPS pathology and diagnostic imaging upload services no longer place an empty given name element in the CDA documents produced when the source HL7® v2 message has an empty string for the given name of the provider. The given name element is now omitted in this case.
EHISC-108	Database timeout if too many future outpatients	<p>The HIPS Web UI no longer shows all patients with future outpatient appointments in lists of current patients, which sometimes led to database timeouts.</p> <p>Patient lists now show current inpatients and patients with appointments on the current day, as well as the configured number of days before admission, after discharge or after service.</p>
EHISC-109	Empty patient list displayed for very large patient numbers	<p>Large data tables in HIPS Web UI no longer encounter an error where the generated JSON data length would exceed the default value of the maximum JSON length property (2 MB).</p> <p>The HIPS UI screen Remove Document is configured by default to show patients for 30 days after discharge and in some healthcare organisations this triggered a JSON length limit error. Patient lists can now reliably support over 50,000 patients.</p>
EHISC-113	Storage of Secure Messaging Interaction Records	HIPS P2P now supports retrieval of Interaction Records for Secure Message Delivery from the NEPS service operation 'Get Interaction Records for Provider Organisation' for all organisations that have an HPI-O identifier.
EHISC-114	Remove PDI document with PI type patient identifier	Pathology and diagnostic imaging documents can now be removed from My Health Record using an HL7® message with a PI type patient identifier. Patient identifier extraction logic was modified to find the primary identifier from the sending facility for both uploading and removing documents.
EHISC-115	Removal of Path and DI documents fails if not in message log table	Pathology and diagnostic imaging documents can now be removed from My Health Record using an HL7® message where there is no existing record in the HL7MessageLog table matching the sending application, sending facility, message control ID and message time.
EHISC-116	Removal of Path and DI documents without sending facility universal ID fails	Pathology and diagnostic imaging documents can now be removed from My Health Record using an HL7® message where the universal ID component of the sending facility is not supplied. The namespace ID component alone is sufficient.
EHISC-119	Removal of Path and DI documents fails if patient has multiple docs uploaded in one minute	Pathology and diagnostic imaging documents can now be removed from My Health Record where the patient has multiple documents uploaded within 1 minute of the original document upload. HIPS services no longer create a multiple episode stub and raise an error in this situation.
EHISC-120	Support for secondary patient identifiers in Path and DI Report documents	HIPS pathology and diagnostic imaging upload services can now populate secondary patient identifiers from an HL7® message into the CDA document. For secondary identifiers to be populated, the applicable root OID must be supplied in the patient identifier assigning authority universal ID subcomponent and "ISO" in the universal ID type subcomponent.

ID	Summary	Change description
EHISC-122	Missing healthcare facility logo in Path and DI Report documents	HIPS pathology and diagnostic imaging upload services now add the healthcare facility logo configured in the Logo column of the Hospital table to the CDA documents generated for pathology and diagnostic imaging reports.
EHISC-123	XSD filename mismatches in WSDL collection	The HIPS 6.1 distribution contains WSDL files with referenced XSD files that are a prerequisite for software developers wanting to integrate with the HIPS web services. Resolved issue where the names of some of these XSD file references did not match their corresponding references in the WSDL/XSD files.
EHISC-133	Generate diagnostic imaging report without observation date in the narrative.	Removed the column for observation date from the narrative of diagnostic imaging reports generated by HIPS, because the observation date is always the same as the image date, being mapped from the same field in the source HL7 message, and so was redundant information.
EHISC-134	Generate diagnostic imaging report without Result Name in the narrative, if same as the Procedure name.	Removed the column for result name from the narrative of diagnostic imaging reports generated by HIPS, in cases where the result name is the same as the imaging examination procedure name, and so is redundant information.
EHISC-135	Generate diagnostic imaging report without Anatomical Region in the narrative.	Removed the column for anatomical region from the narrative of diagnostic imaging reports generated by HIPS, because there is no mapping from the source HL7 message for this data item.
EHISC-160	Possible CSRF (Cross-site request forgery) - Security Test Issue on HIPS 6.2	Additional forms in HIPS-UI include mitigation against cross-site request forgery.
EHISC-161	ASP.NET MVC version disclosure - Security Test Issue on HIPS 6.2	The version of the ASP.NET MVC framework is no longer disclosed in headers.
EHISC-162	Clickjacking: X-Frame-Options header missing - Security Test Issue on HIPS 6.2	The HIPS-UI can be configured to include an X-Frame-Options header to disallow embedding or restrict embedding to a trusted CIS.
EHISC-163	Broken links - Security Test Issue on HIPS 6.2	Pages in the HIPS-UI no longer link to a missing JavaScript file.
EHISC-164	Content type is not specified - Security Test Issue on HIPS 6.2	Error pages in the HIPS-UI now include a Content-Type header.
EHISC-169	Demo Harness fails to start without access to a P2P database	HIPS demo harness can now start without access to a HIPS P2P database.
EHISC-170	Demo Harness Episode Not Found fault not caught and displayed	HIPS demo harness will no longer crash when HIPS returns an error that no episode is found for a Level 1A discharge summary upload.

ID	Summary	Change description
EHISC-171	Error updating ClinicalDocumentVersion when Package of previous document is null	HIPS can successfully supersede a document after the archiving script has removed the CDA package of the previous version from the database.
EHISC-172	IHI validation should happen after document is taken off queue	HIPS will perform IHI validation for pathology and diagnostic imaging report upload operations after the ORU message is consumed from the HIPS queue, as in HIPS v6.1. This corrects an unintentional behaviour change in HIPS v6.2.
EHISC-175	Path/DI HL7 messages limited to 4 MB by MSMQ	Pathology and diagnostic imaging report HL7 messages with embedded PDF files are no longer limited to less than 4 MB by an MSMQ limitation.
EHISC-181	Requester Role is hard-coded to General Medical Practitioner	Requester role in pathology and diagnostic imaging reports is now set to the code for "Referring Provider" from HL7 table 0286 rather than the code for "General Medical Practitioner" from ANZSCO.
EHISC-192	Support for PCML documents	My Health Record B2B Library has been upgraded to v1.1.0 which includes support for Pharmacist Curated Medicines List document uploads. The upload of these documents is untested.
EHISC-195	HIPS UI - Path and DI View switch to first page of stand-alone mode after viewing a report	An issue has been corrected where on the second and later pages of the results table for the pathology and diagnostic imaging views, clicking on the action button to view a document would open the document on a new page rather than a modal popup. This resulted in reverting from the embedded view layout to that of the standalone UI and exposing menu functions and banners that are not meant to be visible.
EHISC-174	HL7 message date time in future causes endless retry	Resolved an issue that occurs when the MessageDateTime in the HL7 is ahead of the DateCreated field in the HL7MessageLog table. The HL7MessageLog DateCreated field is now only compared when the UserHL7MessageDateTime parameter is set to false.
EHISC-176	UTC offset in CDA date/time does not include daylight savings	Corrected the offset from UTC included in date/time fields in CDA documents generated by HIPS when daylight savings was in effect at the applicable date/time. Previous versions of HIPS would include the base offset for the server's time zone without accounting for daylight savings, so summer date/times would be off by one hour.
EHISC-177	CCD defect - Original text "Diagnostic imaging study" not found in narrative	Resolved a conformance defect in diagnostic imaging reports generated by HIPS where they included an original text element "Diagnostic imaging study" in atomic data but no corresponding text in the narrative. The resolution was to remove the original text element.
EHISC-178	CCD defect - Request date/time	Resolved a conformance defect in pathology and diagnostic imaging reports generated by HIPS where the Request Date/Time was set to the same value as the Report Date/Time. HIPS will map the HL7 message fields ORC-9 and OBR-27.4 as the Request Date/Time and check that they are consistent.
EHISC-506	AckQueue contract wrong in web.config	Corrected the AckQueue contract in the web.config to resolve an issue where the endpoint could not be found.

ID	Summary	Change description
EHISC-173	Database error saving name change for local provider	Resolved a database issue when attempting to update a local Health Provider Individual record, which prevented the upload of pathology and diagnostic imaging reports for a provider when the HPI-I of the provider required validation.
EHISC-184	HPI-I Relaxation not working in No-HI-Service mode	Relaxed the validation check that a pathology or diagnostic imaging report HL7 message must contain the HPI-I of the document author when HPI-I exemption is enabled.
EHISC-420	Limit number of entries on MSMQ	To avoid time outs and processing errors we have found that putting a limit on the number of entries accepted by HIPS onto the queue (MSMQ) is beneficial. The limit can be configured and was set to 1,000 during testing but could easily be lower without impacting performance. Once 1,000 entries are on MSMQ, HIPS will send a fault back to the Integration Engine (e.g. Mirth Connect) and so Mirth will then queue the messages until HIPS starts to consume messages again. This effectively uses Mirth to queue any backlog rather than HIPS. That is what Mirth (or similar integration engines) are designed to do.
EHISC-421	Throttling of inbound HL7 ORU pathology and imaging report messages	<p>Configuration to limit the rate at which HL7 pathology and diagnostic imaging reports are accepted.</p> <p>A wait time can be set in HIPS configuration and was set to 350ms, which applies in between HIPS accepting messages from the integration engine. This keeps the inbound message throughput to approximately 2 per second and avoids a continual heavy burst of messages after an outage which could overload HIPS.</p> <p>To ensure inbound messages are processed serially required moving the UploadOrRemoveImaging and UploadOrRemovePathology operations from PCEHRService to a new web service PathologyImagingService that is configured to allow one message to be processed at a time.</p>
EHISC-507	Optimise HIPS to allow reliable high volume ADT and Pathology uploads	Optimisations for 8 stored procedures have been back-ported into HIPS 6.1.2 from HIPS 7.0 to avoid timeouts occurring when retrieving information from the database.
EHISC-423	Proactive retries after database timeouts	In previous versions HIPS returned a negative acknowledgement (NACK) to the integration engine when a database timeout occurred during HL7 ORU message processing. This meant the integration engine needed to re-process the message. To avoid this being necessary HIPS now identifies this situation and retries the processing as it is highly likely that HIPS will be able to re-process the message successfully when database load has reduced.

ID	Summary	Change description
EHISC-424	Proactive retries after failure of HI Service or MHR lookups	<p>In previous versions HIPS returned a negative acknowledgement (NACK) to the integration engine when HIPS was unable to obtain or validate the IHI because the HI Service was unavailable, or when HIPS was unable to check whether the patient had a My Health Record because the Does PCEHR Exist service was unavailable, during HL7 ORU message processing. This meant the integration engine needed to re-process the message. To avoid this being necessary HIPS now identifies this situation and retries the processing as it is highly likely that HIPS will be able to re-process the message successfully when the respective service is available.</p>
EHISC-425	Prevent concurrent processing for a patient	<p>Concurrently processing messages for the same patient has been observed to cause database locking failures and deadlocks. Some Laboratory Information Systems output multiple panels as separate report messages within a short time, increasing the likelihood of encountering this issue.</p> <p>To reduce concurrent processing of messages for the same patient, upon receipt of an HL7 ORU message, HIPS will now check if another HL7 message for the same patient is pending in the queue or being processed. If so, the message will be rejected, and a fault (transport acknowledgement) will be sent to the integration engine.</p> <p>The improved Mirth channel will try to send that message again in 10 seconds but will continue processing messages on other threads which have messages to send to HIPS with a different patient ID.</p>
EHISC-427	Multiple threads from Mirth to HIPS for concurrent patient processing	<p>The supplied Mirth channels for pathology and diagnostic imaging have been configured to run 40 threads with modulation by patient ID to ensure messages are processed in the correct sequence for a patient. A retry delay of 10 seconds is applied on a Mirth thread if a negative transport acknowledgement (SOAP fault) is returned from HIPS. During the retry delay, the channel continues processing messages on other threads which have different patient IDs.</p>
EHISC-428	Store ORU PDF attachments separately while being queued	<p>The supplied Mirth channels for pathology and diagnostic imaging have been enhanced to minimise memory requirements for queueing messages inside Mirth. The channel extracts the embedded PDF from the OBX segment and stores it as an attachment in the database. The embedded PDF is re-inserted when the message is sent to HIPS. This enables the Mirth queue to grow large (at least 1,000,000 messages; actual limit has not been determined).</p>
EHISC-179	CCD warning - Order ID has wrong organisation HPI-O	<p>Review of conformance testing results found that HIPS is populating the requester's order ID using the HPI-O based identifier pattern but including the uploading organisation's HPI-O rather than the requester's HPI-O as the assigning authority for the order ID. HIPS will now populate the Requester Order ID using the requester's HPI-O, if available. If the requester's HPI-O is not supplied in OBR-16.14.2 then the Requester Order ID will be omitted from the document.</p>

ID	Summary	Change description
EHISC-508	Error in View My Health Record from session with JWT authentication	A pre-release of HIPS 6.2.1 would show an error "Sequence contains more than one matching element" when accessing the View My Health Record function from a session established using JWT authentication. This issue has been corrected in the current release.

HIPS 6.1.5

ID	Change description	Notes
EHISC-69	Data Tables error in Discharge Summary episodes page	The episode list page within the Level 1A Discharge Summary upload function in HIPS Web UI no longer displays a "data tables" error when the patient has withdrawn their consent to upload documents to the My Health Record for one of the displayed episodes. (v6.1.5,v6.2.1)
EHISC-511	Caching issue in the document list on the Remove Document page	Using the Lookup by IHI function no longer shows out-of-date information from the cache, but instead clears the cache and reloads the latest information from the database, both for the entered IHI and for all MRNs in the current facility that have the entered IHI assigned to them. (v6.1.5)

HIPS 6.1.4

ID	Change description	Notes
EHISC-512	Refresh button now shows updated results in Internet Explorer	The Refresh button on the Remove Document page was loading cached data instead of loading the latest data from the database. This issue only occurred in Internet Explorer. The Refresh button was loading the data using AJAX Get method and Internet Explorer would cache the result by default and return the cached result when the Refresh button was clicked again. The Refresh button has been modified to use AJAX Post method because the Post method never caches the result and it will make sure the Refresh button always loads the latest data from the database in all browsers. (v6.1.4)

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