Australian Government
Australian Digital Health Agency

HIPS Mobile
Functional Change Log

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Approved for external information
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Summary

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

HIPS Mobile 3.1.0

The following items are addressed by the 3.1.0 minor release:

ADO ID	Summary	Change description
Enhancement 27951	Display a suitable message when launching app and the server is unavailable	In earlier versions of HIPS Mobile, when users launched the app from their home screen short cut, if the UI was unable to connect to the server a blank page would be displayed. HIPS Mobile now presents a page which encourages the user to try reloading the application.
Enhancement 28078	Add friendly name to Domains	HIPS Mobile now supports configuration of a friendly name for each domain. When configured, the friendly name is now shown with the technical domain name on the login page so that domains are more easily identifiable for users that may not be familiar with the technical domain name. The OnlyShowDomainFriendlyName setting controls whether the Domain Friendly Name is shown by itself, or whether it is shown with the Domain Name.
Enhancement 28258	Allow use of facility codes up to 5 Characters (show icon if > 5 Characters)	HIPS Mobile UI can now display up to 5 characters for the facility code. Facilities with more than 5 characters will display a default icon instead.

ADO ID	Summary	Change description
Enhancement 30014	Allow users to sign into HIPS Mobile without selecting their domain	HIPS Mobile can now automatically select a domain by including the domain as part of the URL. Appending with "?domain=testdomain.net.au" will have that domain automatically selected if it exists in HIPS Mobile. Additionally, if the site wants to specify multiple domains, they should be separated by an & character, e.g. "?domain=testdomain.net.au&domain=testdomain2.net.au", and HIPS Mobile will filter the list to show those domains only. Further options are available, refer to the documentation for more information.
Enhancement 31066	Add the ability to sort patient lists by location	Users are now able to sort patients in lists by their location.
Enhancement 32258	Allow sites to display a logo for each facility configured in HIPS Mobile in place of the facility code	HIPS Mobile has been updated to allow for facilities to choose whether to display a logo or facility code. This will be shown in the list of facilities, and in the side menu if the facility has been selected or favourited.
Enhancement 33255	Update Confidentiality & Patient Access Disclaimer text	The Confidentiality & Patient Access Disclaimer text has been updated to match the Agency's privacy policy standard.
Enhancement 33291	Improve performance of patient search	HIPS Mobile has improved its performance when loading patients in the search and other patient lists. This has resulted in faster response times when loading patients.
Enhancement 33576	Show PDF content before CDA for particular document types and levels	The PDF documents that are attached in the CDA document's main body section has now been merged and are displayed ahead of the CDA document. Also, PNG, GIF, JPEG and JPEG files are now supported as attachments.
Enhancement 33661	ESD No. 47 - Move the MHR status above the fold - promote it to the main section of the patient card	HIPS Mobile now displays the My Health Record status on the main section of the patient card, so users no longer have to expand the card to see a patient's status.
Enhancement 34099	HM v3.1 - Review and update Document Class data	The following documents have been added to the HIPS Mobile Document Class configuration: • MyMedicare Registered Practice Information • Patient Health Summary • Transfer Summary • Medication Chart
Enhancement 34564	Upgrade HIPS Mobile Angular Version 16	The HIPS Mobile UI has been updated to latest version of Angular: 16.0.1. This upgrade brings security, performance and other benefits.
Enhancement 34771	Upgrade FIDO library to resolve error Leftover bytes decoding pubArea error occurring on Windows 11 when using device security	The FIDO2 .NET library (WebAuthn) has been updated to the latest version (3.0.1). If the windows users are using biometric authentication, the biometric authentication should be removed from the database.

ADO ID	Summary	Change description
Enhancement 36086	Dynamically populate the list of document types shown in document list filters	HIPS Mobile has been updated so that documents can be filtered by document classes that are not configured in the underlying HIPS system. Additionally, only document classes that exist within the specified date range are shown.
Defect 28692	Deployment fails if Full-Text Search is installed and a full text index on given names has not already been added via the HIPS script Optional_HIPS_EnableFullTextIndexSearch.sql	The deployment failing with full text search index creation step has been fixed.
Defect 28698	Incorrect account configured for HIPSMobileRole during deployment when "HIPS.Database.ConnectionString.Upgrade" connectionstring uses SQL Auth	Installation scripts were using the incorrect details to configure HIPS Mobile and HIPS database permissions, there are 4 connections strings configured (HIPS Mobile, HIPS Mobile Upgrade, HIPS and HIPS Upgrade). The upgrade connection strings are now used to run the database commands.
Defect 29133	An error is displayed when a user clicks on an email address in pdf viewer	The email or FTP links shown in the document viewer have been fixed and now open in a new browser tab or pop-up.
Defect 29507	Border line is not aligned properly in Supported devices and browsers page	When focusing on the Supported Devices and Browsers dialog, the border that appeared intersected the text. This has been corrected so that the border aligns around the dialog correctly and no longer intersects the text.
Defect 30021	Currently selected document type and subtype filters are not getting retained when the page is redisplayed	The document type and subtype filters that were applied to a list while viewing a patient during a HIPS Mobile session are now remembered when a user returns to the document list for the same patient. Note: these filters are not retained if the user logs out, they will revert to the default filter.
Defect 30887	HIPS Mobile should not include domain in the Login when sending requests to HIPS	Users now have their logins properly shown in the HIPS response so that the domain of the user isn't shown twice.
Defect 31007	The hpa.ConfigurationSetting Value column should allow any size value	The hpa.ConfigurationSetting table's Value column was overly restrictive, only allowing 256 characters. This prevented sites from setting long setting values, including the full list of COVID-19 immunisations in the ImmunisationHighlightVaccines setting. The Value field has been extended to support any length of characters.
Defect 31045	Search page is attempting to Take too many records	HIPS Mobile no longer attempts to take more records than requested but takes exactly what it needs for the user's request.
Defect 31046	Wildcard search is not working unless the wildcard is included on the beginning and end	The wildcard search was not working if used in the middle of the search term. The issue has now been fixed and can be used anywhere in the search text.

ADO ID	Summary	Change description
Defect 31167	Date is not getting calculated correctly in heading and filters for few lists	The "to" date displayed on document lists would occasionally be shown incorrectly, sometimes showing the day after. The date filter now correctly shows the "to" date according to the local date and time.
Defect 33780	Search does not match criteria on given name if it finds another patient with family name that matches the search criteria, for example "Jackson"	The quick search has been improved so that search queries return all patient given names and family names matches, instead of stopping at either a given name or a family name match.
Defect 34930	Text filter should work with all text that appears on cards or rows	Previously, users were unable to filter document lists using the author's title. The document list author title has now been included in the fields to filter when using the text filter input.
Defect 34940	Table heading with no information is displayed in pathology reports component	Empty grouped lists under a pathology or diagnostic imaging organisation are no longer displayed and are removed from their corresponding lists.
Defect 35069	Global allocated patient list is not showing the correct patient's count	The allocated patients cache now gets cleared when adding or deleting patients using backend API.
Defect 35218	HIPS Mobile document list should include documents of new document types	HIPS Mobile now includes the new document types in the document list.
Defect 35761	X-Content-Type-Options – header not found	HIPS Mobile API has newly applied security fixes to includes specific header information that mitigates potential attacks.
Defect 35764	Browser Cache directive (leaking sensitive information)	HIPS Mobile API has secure HTTP headers that have been added so that responses from the API don't get cached and used in the browser.
Defect 35765	Reflected Cross-site scripting (XSS) - Reflected javascript in ajax	Reflected cross-site scripting has now been prevented by ensuring unsafe characters in the requests to the API are detected and rejected by HIPS Mobile. Prior to this change, the HIPS Mobile API would reflect back unsafe characters, such as html, in error responses. Although the API reflected these values back, the UI would not execute them.
Defect 35766	HIPS Mobile UI: X-Content-Type-Options – header not found	HIPS Mobile UI has newly applied security fixes to include specific header information that mitigates potential attacks.
Defect 35770	HIPS Mobile UI: X-Frame-Options HTTP - header checking	HIPS Mobile UI has removed obsolete header information so that new header information is used and mitigates potential attacks.

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ADO ID	Summary	Change description
Defect 35956	Insufficient Authentication: Account Takeover via Authentication Flaw	A security audit identified a vulnerability which allowed an attacker to take over someone else's account by intercepting and altering the contents of the API requests during the login process. This vulnerability is no longer exploitable as the API will no longer trust the user input and validate server side. A part of this change includes the removal of the Forgot PIN feature, and removal of some local storage information, such as the saved username.
Defect 35957	Insufficient Authentication: Lack of Authentication to Sensitive Files	HIPS Mobile no longer has Swagger available by default so that the risk of an attacker getting access to the API is mitigated. Further to this, the Swagger UI cannot be enabled when the Environment configuration setting is set to Production.
Defect 35958	Insufficient Authorisation: Lack of Server-side Validation	HIPS Mobile has improved its security around the user's PIN, and has also had the reset PIN functionality removed as a result. This change mitigates security risks during the login process, preventing bad actors from taking over another user's account.
Defect 35959	Insufficient Anti-automation: Bypass of Rate Limiting Controls	HIPS Mobile no longer allows PIN related limiting controls to be sent in requests to the API. This limiting controls are now handled through configuration and are not accessible to an end user, meaning a potential attacker is unable to manipulate and bypass those limiting controls set in place.
Defect 35960	Insufficient Authentication: Username Enumeration	Prior to this change, HIPS Mobile would respond differently depending on whether the user entered an invalid username, or an invalid password. This difference was enough to inform an attacker whether the account existed or not. HIPS Mobile now returns a consistent error message in these cases, meaning that an attacker is no longer able to determine if the credentials they supplied belong to a valid user account or not.
Defect 36232	HIPS Mobile Auth API: X-Content-Type-Options – header not found	HIPS Mobile Auth has newly applied security fixes to include specific header information that mitigates potential attacks.

HIPS Mobile 3.0.2

The following items are addressed by the 3.0.2 patch release:

ADO ID	Summary	Change description
Enhancement 31622	HIPS Mobile to support users logging in with their userPrincipalName (UPN) prefix when different to their sAMAccountName	HIPS Mobile now supports integration with Active Directory domains that contain multiple User Principal Name (UPN) suffixes, using the UPN prefix as the user identifier instead of the sAMAccountName attribute. Refer to https://collaborate.digitalhealth.gov.au/display/HIPSP/HIPS+Mobile+3.0+-+Managing+Domains for information on how to configure HIPS Mobile for domains with multiple UPN suffixes.

HIPS Mobile 3.0.1

The following items were addressed in the 3.0.1 patch release:

ADO ID	Summary	Change description
Enhancement 29855	HIPS Mobile to support LDAPS for connecting to Active Directory domain controllers	HIPS Mobile 3.0.1 can be configured to connect to Active Directory domain controllers using either the LDAP protocol (port 389) or the LDAPS protocol (port 636). The HIPS Mobile database table dbo.Domain has a new column Protocol which defaults to 'LDAP' and must be changed to 'LDAPS' to enable the use of LDAPS. If the Protocol is set to LDAP, then HIPS Mobile will use Kerberos / NTLM encryption and authentication on the connection to LDAP port 389. If the Protocol is set to LDAPS, then HIPS Mobile will use TLS encryption and Basic authentication on the connection to LDAPS port 636. To use LDAPS, the HIPS Mobile server must trust the certificate of the domain controller it is connecting to. This requires that the certificate or its issuer or root certificate appears in the Trusted Root Certification Authorities folder of the user or machine certificate store, and requires that the Subject Alternative Names (SAN) field of the certificate contains the DNS Name that HIPS Mobile is making the LDAPS connection to.

ADO ID	Summary	Change description
Defect 29853	HIPS Mobile takes too long to retrieve a user's security groups from a large Active Directory domain	HIPS Mobile 3.0.1 implements three optimised methods of searching the Active Directory to retrieve the list of groups that the user is a member of. All three options are significantly faster than the method used in HIPS Mobile 3.0.0.
		The new default method, **'ExpandGroupsUsingGlobalCatalog'** uses the 'tokenGroups' property that is stored in the global catalog. This method is fast, includes the primary group and multiple levels of groups, but requires a global catalog server to be available. Depending upon the domain controller configuration, it may be preferable to choose one of the other options.
		If the domain controller is not a global catalog server, the method **'ExpandGroupsUsingRecursion'** may be preferable. This method uses the 'memberOf' property and repeats the process for each group. This method is slightly slower and will not include the primary group e.g. 'Domain Users', but does not require querying a global catalog.
		Alternately, if the domain controller is in danger of becoming overloaded, the method **'DirectGroupsOnly'** may be preferable. This method uses the 'memberOf' property for the user object only. This method is the fastest but does not include the primary group or multiple levels, so users will need to be assigned directly to the groups that are configured for HIPS Mobile facility security.
		These methods may be set per domain by specifying them in the **GroupSearchOption** property of the domain settings in the **Configuration.psd1** file at installation, or modified via the stored procedure **dbo._ConfigureDomainNames** at a later date.

HIPS Mobile 3.0

The following items were addressed in the HIPS Mobile 3.0 release:

ADO ID	Summary	Change description
Enhancement 18153	Number of circles on the PIN entry screen should be the number of digits in the user's PIN and should auto submit	The number of circles shown on the enter PIN page now matches the PIN length for the user and the PIN is submitted as soon as the user enters the correct number of digits.

ADO ID	Summary	Change description
Enhancement 19010	Support showing password text on login screen	The login page in HIPS Mobile UI has been extended to include an eye button on the password field which shows the user what they have entered. This will help users confirm they have entered their password correctly.
Enhancement 19162	Support inline links in PDFs	Inline attachment links were not supported in earlier versions of HIPS Mobile. This release of HIPS Mobile now features inline attachment links that the user can tap on to open attachments.
Enhancement 19220	Support HIPS Mobile connecting to multiple Active Directory instances	HIPS Mobile now supports users from multiple configured domains. Domains can be registered in the HIPS Mobile database, and will be made available on the login screen for users to choose from when logging into the application. If a single domain is configured, the domain selection will be defaulted to that single domain and the user can simply enter their username and password to login.
Enhancement 19239	Multi-factor authentication (MFA) with Fast Identity Online (FIDO) Web Authentication (WebAuthn) including unlock with PIN, device security, biometric, face and fingerprint recognition	Device security authentication has been added as a new login option - this enables supported devices to login to HIPS Mobile using the device's built-in authentication capability, including fingerprint or face recognition where the user has enabled these on their device. HIPS Mobile can be configured to enforce combined PIN and device security, device security only or PIN only. In addition to this, the PIN security has been enhanced to verify the PIN on the HIPS Mobile server rather than the client, so that a user's PIN is better protected against brute-forcing, and a minimum PIN length can be configured.
Enhancement 19281	Improve deployment scripts to support specifying a 'certificate domain subject' instead of a thumbprint for token signing and HTTPS binding certificates	The deployment configuration has been altered to specify the certificate name (from the certificate subject) rather than relying on a certificate thumbprint and will now use this to select certificates for HTTPS bindings and token signing. The deployment script will locate a certificate in the configured certificate store. If more than one is found, the script will take the certificate with the longest expiry date. This change ensures the configured deployment package can be re-run in the future without needing to update a thumbprint that may have expired since first deployed; this may be useful in disaster recovery situations.

ADO ID	Summary	Change description
Enhancement 19284	Ensure good appearance of the patient card for patients with no episodes	The patient cards shown in patient lists, search results and when viewing a patient have been modified such that they only show relevant information, such as when the patient does not have an associated episode, the episode fields are not shown on the card.
Enhancement 19285	Add configuration option to hide MRN for sites where the MRN is not useful, such as a GUID format	A new configuration setting has been added to HIPS Mobile to enable sites to control whether the UI should display MRN details, such as in patient cards, search forms, document viewers and help text. This feature is useful for sites who primarily create patients in HIPS using the ValidatedIhi identifier type, which results in HIPS generating a GUID for the MRN which has no relevance to such sites. The new configuration setting can be configured at the global scope, meaning it applies to the entire HIPS Mobile instance.
Enhancement 19286	Add option to hide the different patient lists for non hospital settings	New configuration settings have been added to HIPS Mobile to control the visibility of each patient list in the navigation menu and facility overview pages. Sites that do not use certain episode types can hide the applicable patient list by modifying the HideAllocatedPatients, HideInpatients, HideOutpatients, HideEmergencyPatients or HideAllPatients settings at a global scope to apply across the entire application, or at the facility scope if only required for specific facilities.
Enhancement 19407	Implement HIPS Mobile Archiving Utility	HIPS Mobile now has a dedicated data archiving utility to extract data from the database and store in BCP files. This utility follows the same standard as the HIPS data archiving utility, and is important to run to ensure the database remains at a manageable size for consistent performance.
Enhancement 19435	Notify administrator when a feedback item has been added	the feedback feature was introduced in the initial version of HIPS Mobile, however there was no mechanism to alert an administrator when feedback was submitted. Guidance on how to configure notifications for feedback using SQL Server functionality has been documented in the HIPS Mobile online documentation.

ADO ID	Summary	Change description
Enhancement 19460	Pop-up warning if device is not supported	HIPS Mobile now presents a pop-up alert when the app is opened notifying the user if their device is not supported. This message appears when an unsupported OS, OS version, or browser/OS combination is used. The user of an unsupported device/browser can continue to use the app at their own risk.
Enhancement 19462	Interface to populate list of allocated patients for each clinician	New allocated patient API endpoints has been added to enable sites to integrate HIPS Mobile with hospital information systems to auto-generate lists of allocated patients for clinicians, rather than clinicians having to search for patients individually and add them in themselves. This will make the workflow more streamlined for clinicians, and takes away the barrier of the less tech-familiar people. This also makes the application more practical to use, and aligns with what some clinical teams currently do, which is have a patient list printed out for them each day/round.
Enhancement 19463	Interface to retrieve list of allocated patients for each clinician	New allocated patient API endpoints have been added to HIPS Mobile to support allocated patient functionality in the HIPS Mobile UI, and to enable sites to retrieve allocated patient details when integrating their clinical systems with HIPS Mobile.
Enhancement 19464	Display list of allocated patients for each clinician	HIPS Mobile can now display an allocated patients list for sites who wish to integrate their clinical information systems with HIPS Mobile. This list can be disabled across the application, or for specific facilities if not required by modifying the HideAllocatedPatients configuration setting.
Enhancement 19465	Allow wildcard search on given name and surname	HIPS Mobile now has an improved search capability and now supports wildcard search for patient given names and surnames. Wildcard searching can be used by including an asterisk in the search query.
Enhancement 19679	Displaying the EMPI ID field in the search form should be configurable	A new configuration setting called EnterpriseIDFieldEnable has been added to HIPS Mobile to control the visibility of the EMPI ID field. Sites that do not use this field can configure the setting to hide the field from the advanced search criteria.

ADO ID	Summary	Change description
Enhancement 20190	Display the Anatomical Region field in the Diagnostic Imaging Report View	HIPS Mobile will now display the anatomical region information in Diagnostic Imaging Report View cards. This change means more useful information is surfaced on the list and can help clinicians find useful documents faster.
Enhancement 20694	Disable unrequired identity server endpoints - to avoid clickjacking being raised by Acunetix	The HIPS Mobile Authentication API has been modified to disable identity server's unused endpoints. Disabling these endpoints that are not required for HIPS Mobile mitigates potential clickjacking attacks.
Enhancement 20697	HPA APIs and UI - Configure HSTS with includeSubdomains	The HIPS Mobile app, API and Authentication API have been modified to specify the "includeSubdomains" flag in the HTTP response header "Strict-Transport-Security" as per HTTP Strict Transport Security (HSTS) best practice.
Enhancement 20700	Update from .NET Core 3.1 to .NET 6 (LTS)	Components of HIPS Mobile that run on the .NET platform have been updated to use .NET 6.0.
Enhancement 20740	Enhancements to application logging for HIPS Mobile APIs	The HIPS Mobile APIs have been modified to use the log4net logging framework which will provide sites with more options for logging events from HIPS Mobile.
Enhancement 20776	Use standard error message style on login page when user tries to create an insecure PIN	On the create PIN page, error messages are shown when a user tries to configure an insecure PIN. These messages were displayed using an old modal style with an "OK" button, which is inconsistent with the rest of the application. These messages have been changed to the standard pop-up style message used throughout the application.
Enhancement 21398	The filtered document information should be consistent across pages	There was an issue that the filtered document information was not consistent across MHR list pages. The issue has been fixed.
Enhancement 22921	DBUpgrade add permissions to set up service accounts	The HIPS Mobile database creation and permissions can now optionally be set during the deployment.
Enhancement 25879	Update HIPS Mobile UI third party reference packages	To ensure we maintain the supportability of the application we have updated dependent packages to the latest stable versions, which includes using Angular 13.
Enhancement 25968	Update RunTimeSettings to make more secure for UI	HIPS Mobile settings and runtime settings API requests have additional security validation to ensure that the UI cannot retrieve sensitive settings.

ADO ID	Summary	Change description
Enhancement 27178	Document how sites can enforce password complexity for HIPS Mobile according to Agency recommended standard	Advice is given on the Security Model page to assist HIPS sites to comply with the password complexity requirements in the My Health Record rules when using Active Directory for authentication.
Enhancement 27446	Enable ISM recommended TLS 1.2 and 1.3 cipher suites	The security configuration applied during deployment of HIPS Mobile has been extended to ensure the server has only the ISM recommended TLS 1.2 and TLS 1.3 cipher suites enabled. Note: TLS 1.3 cipher suites are currently only supported on Windows Server 2022.
Enhancement 27621	Entered PIN should be cleared out automatically when an insecure PIN is entered while creating a PIN	The PIN validation has been modified so that when creating a new PIN and entering one that is not secure, the entered PIN is cleared so that the user can enter a more secure PIN instead.
Enhancement 26454	Migrate APIs and CLI from Self-Contained Deployment to Framework Dependent Deployment	In the HIPS Mobile 2.0 release, the HIPS Mobile API, HIPS Mobile Authentication API and HIPS Mobile Configuration CLI components were built with .NET Core 3.1 and published using the Self-Contained Deployment (SCD) model. This meant these components could run on a server without the .NET Core runtime installed because the .NET Core runtime files were bundled with each component. Several downsides to the SCD model led to a decision to change to the Framework Dependent Deployment (FDD) model with HIPS Mobile 3.0, including increased deployment package size and the inability to apply security patches without upgrading. Sites will benefit from the change to the FDD model with much smaller release packages, components sharing the same .NET runtime already installed on the server, which will reduce the disk space and memory requirements, and most importantly, the ability for HIPS Mobile components to utilise security updates to the .NET 6.0 runtime binaries on the application server without requiring the installation of a HIPS Mobile patch release.
Defect 26552	URLs in attachments are not working when clicked on	There was a defect in HIPS Mobile 2.0 that the user could not open HTTPS, HTTP, or FTP links in documents. This defect has been fixed.
Defect 26981	Long text is not getting wrapped into next line in Allergies and reactions details	There was an issue that long text was not wrapped in the Allergy and Adverse Reaction list (Substance/Agent property) and the Medicines list (Brand property). These issues have been fixed.

ADO ID	Summary	Change description
Defect 27859	CLI configuration file in installation package should not be modified by the deployment script	A defect was found where the HIPS Mobile deployment scripts would modify the original copy of the appsettings.config file for the configuration CLI in the installation package, in addition to the deployed copy of the file in the target folder. This resulted in subsequent deployments not picking up changes to URLs or client secrets that were made in the Configuration.psd1 file. Now, when the configuration CLI is installed into the target folder for HIPS Mobile, the original configuration file is not updated, meaning subsequent installations of the CLI utility will use the configuration settings defined in the Configuration.psd1 file each time, allowing for changes to be made in the Configuration.psd1 file.
Defect 27881	Invalid accessibility attribute aria-orientation="vertical" on some elements	There were accessibility issues in the home screen facility list and the menu. Accessibility issues have been fixed.
Defect 27975	API Deployment Script does not check the error code from DB Upgrade	If an error is encountered in the dbupgrade process the installation script will stop any further processing.
Defect 26376	Facility Overview shows error on first load for a facility	There was an issue where the facility overview did not load successfully on the first attempt. This issue has been fixed.
Defect 26378	Table sections with image objects are not displayed correctly in document viewer	HIPS Mobile 2.0 was not displaying table sections with image objects correctly in the document viewer. The issue has been fixed.
Defect 21375	Pathology Report and Imaging Report days ago text should be calculated based on the local time	The relative time text displayed after dates such as "27-Sep-2021 (25 days ago)" was calculated using the UTC time zone. The relative time text is now calculated using the local time zone of the device running the HIPS Mobile UI.
Defect 20743	Unexpected breadcrumb behaviour when using search	There was a search breadcrumb on top of the My Patients list page, which has been removed. In addition to that, when the user pressed the "X" close button without typing any search text, there was an incorrect display message in the patient search result list. The message has been updated.

ADO ID	Summary	Change description
Defect 20737	HIPS Mobile UI - Host header attack (Medium)	To mitigate a host header attack vulnerability in which an attacker could manipulate the Host header seen by the web application and cause the application to behave in unexpected ways, we have added support for supplying the hostname in the Bindings sections of the Configuration.psd1 file. When configured, the hostname will be set against the bindings in IIS and will be used when verifying the URI during deployment. Note: setting the hostname will prevent the APIs and UI being accessible on localhost, the hostname must be used.
Defect 20738	HPA UI - Clickjacking: X-Frame-Options header (Low)	To improve the security of HIPS Mobile, the HIPS Mobile UI web.config file has been modified to include X-Frame-Options with frame-ancestors directive as a custom header.
Defect 20739	HPA UI - Content Security Policy (CSP) not implemented (Informational)	To improve the security of HIPS Mobile, the HIPS Mobile UI web.config file has been modified to include a Content Security Policy in the HTTP headers.

HIPS Mobile 2.0

The following items were addressed in the HIPS Mobile 2.0 release:

ADO ID	Summary	Change description
Enhancement 17610	Update User Claims from Active Directory on Token Refresh	Each time the user's access token is refreshed, the HIPS Mobile Authentication API will now refresh the user's information from the Active Directory, including the user's full name and which security groups they are a member of. This enables HIPS Mobile to update the user's name and accessible facilities after a new access token is obtained.
Enhancement 17940	Encourage users to add shortcut to the device home screen	A new screen has been added to the login flow to prompt users to create a shortcut on their device home screen. HIPS Mobile is optimised to run as a progressive web application (PWA) and it is strongly encouraged that users run it from the shortcut on their device rather than from the browser.
Enhancement 18782	Add clear buttons to clear search criteria	Clear buttons have been added to each field on the search form to make it easier for users to remove values from each field and an additional button has been added to the bottom of the search form to clear all fields on the form.
Enhancement 19116	Provide an easy way to switch between showing My Patients at the current facility and My Patients across all facilities	HIPS Mobile has been modified to extend the filtering options in the My Patients list to include facility, allowing users to switch quickly between the all facilities view of their My Patients list and their currently selected facility view of their My Patients list.
Enhancement 19232	Support document subtype metadata	HIPS Mobile will display document subtype data and filters when connected to a version of HIPS that supports displaying document subtypes in the list of documents in a My Health Record, which is available in HIPS 7.3 or above.
Enhancement 19234	Add component for displaying Emergency Contact Details from the patient's My Health Record	The HIPS Mobile My Health Record Overview page has a new button for displaying a patient's 'Emergency Contact Details' from their My Health Record. This button will show emergency contact details for the patient which can include the Type, Name, Relationship, Phone Number and Email Address. Note: this functionality is only available for HIPS version 8.3.0 or above.

ADO ID	Summary	Change description
Enhancement 19235	Implement Gain Emergency Access functionality	Users are now able to gain Emergency Access to a patient's My Health Record when access to the My Health Record is necessary to lessen or prevent: a serious threat to an individual's life, health or safety and it is unreasonable or impracticable to obtain the patient's consent; or a serious threat to public health or safety.
Enhancement 19261	Enhance the appearance of the keyboard shortcut screen	The performance and appearance of the Keyboard Shortcuts modal has been generally improved.
Enhancement 19455	Make the appearance of My Health Record Overview cards consistent	My Health Record cards, which are used to represent My Health Record information throughout HIPS Mobile, now share a consistent style which makes it easier to identify relevant information across different pages. The changes include consistently applying the same order and positioning of key information and displaying the same number of columns on cards.
Enhancement 19466	Change login flow to require a user to log in before setting a pin	The login process has changed in HIPS Mobile 2.0, users must now login successfully prior to creating their PIN. This is in line with most user's expectations and should improve user experience with the login process.
Enhancement 19467	Follow Agency brand guidelines for 3rd party logos by adding chevron	The My Health Record logo has been modified to include a chevron and the text "My Health Record" so that it follows the Agency guidelines for third party logos.
Enhancement 19471	Add size limit support for memory caching to Cache Manager	Support for the SizeLimit property of Microsoft's MemoryCache has been added to enable setting a limit on the amount of memory used by caches in the application. Microsoft's MemoryCache is the default cache configured for application data.
Enhancement 19707	Reduce patient card padding at the bottom (where applicable) to save screen real estate on tablet	The padding on HIPS Mobile patient cards has been adjusted to reduce the amount of empty space, allowing more cards to be displayed on the screen.
Enhancement 20098	Improve the appearance of date pickers used throughout the pages.	A new date picker component has been introduced, with a common and improved appearance across all browsers and systems and using the d-mmm-yyyy display date format. This new component should ensure users all share the same experience with date pickers, regardless of their device.

ADO ID	Summary	Change description
Enhancement 20457	Further enhancements to the look of supported devices page	The Supported Devices information shown in HIPS Mobile UI has been renamed Supported Devices and Browsers. The supported devices are now available to view in two places: They are shown in the login sequence, however rather than showing the full list a basic description with the option to tap a link to open the full Supported Devices and Browsers dialog is shown. The Supported Devices and Browsers information is also available for viewing from the Help menu at any time once logged in.
Enhancement 20728	Display better message on login screen if users account has been locked	The error message shown to users when their account was locked was "Invalid username or password." which was not helpful. This message has been improved and will now show a more meaningful message to users: "There have been too many failed attempts to login with this account in a short period of time. Please try again later, or contact your administrator to unlock your account.".
Enhancement 20894	Add a checklist page in Collaborate at the beginning of the Perform the installation for users to confirm they have completed the prerequisites	Installation documentation in Collaborate has been improved and now includes a checklist to help installers verify if they have completed the prerequisites prior to installing HIPS Mobile.
Enhancement 20989	Add a retry button on My Health Record Overview and simplified message when national infrastructure is unavailable	The My Health Record Overview page in HIPS Mobile now displays a simplified error message in most cases where an error is caused by the HI Service or My Health Record system being unavailable. A retry button is also shown to allow the user to retry the action when an error message is displayed.
Enhancement 21013	Update HIPS Mobile UI third party reference packages	To ensure we maintain supportability of the application we have updated dependent packages to the latest stable versions, which includes using Angular 12.
Enhancement 21112	Disable automatic spelling correction in text entry fields for searching	The automatic spelling correction was not disabled in the search fields, causing names to be autocorrected to different words after being entered. This was inconvenient and autocorrect is not required in the search forms, therefore automatic spelling correction has been disabled in the search fields.

ADO ID	Summary	Change description
Enhancement 21113	Enhancements to pop-up messages used in the application	The pop-up message minimum display time has been reduced to 4 seconds by default and is now configurable. The length of time a message is displayed is proportional to the length of the message, which results in longer messages being displayed for longer than the minimum display time. The longer message display time is calculated by using reading speed in words per minute. The reading speed value is configurable; by default, it is set to 180 words per minute. In addition to this change, if a user taps on the pop-up message, it will now remain on screen until the user closes the message (by clicking the x button) or the device is locked. This ensures users can keep a message on screen until it has been read.
Enhancement 21211	Rename HPA as "HIPS Mobile" as the new product and branding name	HIPS Provider App aka HPA will now only be referred to as HIPS Mobile. References to the former names have been updated in most code and documentation to reflect this.
Enhancement 21685	Improve logic for setting secure ciphers during deployment	HIPS Mobile deployments by default will now configure the application server to use preferred TLS ciphers, and disable all ciphers where their strength is less than 128 bits to mitigate against Sweet32 attacks, a SSL/TLS vulnerability that allows attackers to compromise HTTPS connections using 64-bit block ciphers. If there are no 128 bit or higher ciphers enabled on the application server, the deployment will not disable the weaker ciphers. Sites who wish to prevent this from running during deployment can do so by including the -Insecure argument when executing the deployment.
Enhancement 21699	Make the "Change Access Level" page more accessible from the My Health Record Overview page	HIPS Mobile has been modified to include a Change Access Level button on the My Health Record Overview page. This will make the Change Access Level page more easily accessible as it was previously hidden in the drop-down menu.
Enhancement 22119	Enhance the appearance of menu items on the Patient Lists page	Style changes have been made in the patient buttons of Hospital Overview page to become more consistent with the app and to generally improve the appearance.
Defect 18767	Episode type option should not be highlighted when the page is first opened	Episode type options occasionally and incorrectly remained highlighted after being tapped. This issue has now been resolved.

ADO ID	Summary	Change description
Defect 19748	Search Panel comes up if device is rotated landscape	On some devices while viewing a patient from a list of search results, switching the device from portrait to landscape would cause the search form to open to the left of the patient information when it should not appear. This issue has been addressed by ensuring the search form gets closed once a patient has been selected from the search results.
Defect 19786	Unexpected behaviour with patient name banner in combination with user icon or search bar	When viewing the My Health Record Overview page of a patient and after opening the user menu or search bar, if a user scrolled down the page while the menu or search were open, the 'patient name' banner would replace the menu and search icons at the top of the screen, however the menus would remain open. This has now been fixed and menus are now hidden when their icons are no longer visible.
Defect 20100	Log out has some issues if the user presses a button while log out is being processed	The log out process would experience some minor issues when a user pressed a button while the log out is processing. For example, if a user tapped "Log in with my PIN" too quickly, it will navigate to the enter pin page, then back to the logged-out page once the original logout process is complete. This issue has been resolved.
Defect 20155	Extra blank page on rendered PDF for some documents	Some PDF documents would show an extra blank page when rendered. This issue has now been resolved; PDF documents will now show the correct number of pages.
Defect 20201	Difficult to access first item in the recently viewed patient list or perform search when using a phone in landscape	When HIPS Mobile is used with smaller phones in landscape mode it was difficult to perform searches and use the recently viewed patient list. The experience has been improved in landscape mode, users can now scroll and select a patient from the recently viewed patient list or search results on smaller phones.
Defect 20423	Issue occurs when going back to "My Patients" from My Health Record through breadcrumb when text filter is applied	Text filters were incorrectly being reset when going back to My Patients. The issue has been resolved, and general filter behaviour has been improved such that filters are now retained until the device is locked or the user switches facility.
Defect 20433	Dependency vulnerability in log4net 2.0.8 (Low)	The log4net library was included in the DB Upgrade as a reference, however it was not used. The reference of the log4net library has now been removed. In addition to cleaning up the reference, the DB Upgrade project has been migrated to the .NET Core 3.1 from .NET framework 4.7.2.

Approved for external information

ADO ID	Summary	Change description
Defect 20440	Dependency vulnerability in marked 1.1.0 (Low)	The ngx-markdown package has been updated to a version that ensures the markdown package is set to version 2.0 or later to resolve the vulnerability in the package.
Defect 20659	Ability to fingerprint web server (Informational risk)	Unnecessary version and product information have been stripped from the HTTP headers to reduce information leakage. Important: this change is not compatible with Windows Server 2012 R2 or earlier Windows Server operating systems. Refer to the Known Issues section below for a workaround.
Defect 20726	Some modals components remained on screen after the UI auto locks due to a period of inactivity	Some modal components behaved incorrectly after the app automatically locked after several minutes of inactivity. This issue has now been resolved; modals are now forced to closed state during the auto-lock process.
Defect 20777	Pathology Report View and Diagnostic Imaging Report View the Up and Down arrows used to scroll between documents do not work correctly on organisation boundaries when group by Organisation is enabled	On the Pathology Report View and Diagnostic Imaging Report View the Up and Down arrows used to scroll between documents were not behaving correctly on organisation boundaries when group by Organisation is enabled. The issue is now resolved, the Up and Down arrows will now be correctly disabled on the organisation boundaries, that is when viewing the first and last document within an Organisation grouping.
Defect 20778	Label of dropdown to select document class should be "Type" not "Class"	The Document List Document Class dropdown label has been changed to "Type" where previously it was incorrectly labelled "Class".
Defect 20954	Sorting patient lists by family name should not be case sensitive	When sorting patient lists by patient family name, the sort did not work as expected, this was because the sorting was case sensitive. Sorting by family name is no longer case sensitive and patient family name now sorts as expected.
Defect 21119	Some font and icon colours changed when using iOS version 15 or above	HIPS Mobile UI has been modified to ensure the correct colour is used for fonts and icons throughout the application.

HIPS Mobile 1.0 (also known as HPA 1.0)

HIPS Mobile allows clinicians in the hospital setting, untethered from the desktop HIPS UI, mobile device access to patient My Health Record information while engaging with patients in ward and bed-side settings, as examples. Clinicians in public and private hospitals already widely rely on mobile devices (smart phones and tablets) for accessing their patients' clinical information, so HIPS Mobile will add My Health Record patient data access to their repertoire.

HIPS Mobile v1.0 is the first major release of HIPS Mobile. HIPS Mobile is a mobile web application that may be added to an existing HIPS v7.1 or higher instance operated by a HIPS site, enabling users to list, download and display CDA™ documents and views from a patient's My Health Record on their mobile or tablet device.

The key features of the application are:

Secure Active Directory login and PIN lock/unlock

Users can log in securely using their credentials in the site's Active Directory, and secure the login with a local device PIN, enabling the user to quickly return to the application, enter their PIN and continue reviewing their patients' My Health Record information.

Facility selection and favourites

Users can view patients from different healthcare facilities within the HIPS instance, where the user is in an Active Directory security group which is authorised to access the My Health Record on behalf of the facility. Users can mark their frequently accessed facilities as favourites for quick access.

Patient selection and favourites

Users have a variety of ways to find patients in their care including:

- Patient lists based on common episode types - Emergency, Inpatient, Outpatients, or All Current Patients (including pre-admitted), depending upon the provision of Admission, Discharge and Transfer (ADT) messages from the Patient Administration System into HIPS.

- My Patients lists – view all patients that have been added to the user's My Patients list either at a specific facility, or across all accessible facilities. This list syncs with the HIPS UI standalone view.

- Accessing recently viewed patients from quick search bar.

- Search for patients using the quick search or show more criteria search functionality.

Gaining access to a My Health Record

Users can gain access without a code or enter a patient's access code to gain access or change the healthcare provider organisation's level of access to a patient's My Health Record.

Displaying a patient's My Health Record

Users can view the following details from their patient's My Health Record:

- COVID-19 and Other Immunisations (Australian Immunisation Register and Immunisation Consolidated View)

- Allergies and Adverse Reactions (from Medicines View)

- Medicines (from Medicines View)

- Discharge Summaries

- Advance Care (Advance Care Planning Document, Goals of Care Document and Advance Care Directive Custodian)

- PBS, AIR, Organ Donor and MBS (Medicare Overview)

- Pathology Report View

- Diagnostic Imaging Report View

- Document List (for other general documents).

- Download and display of clinical documents

- Users can view, download, save and print documents from the patient's My Health Record.