eRAD RIS

Customer Release Notes

Build v3.2021.2.15

REVISED FEBRUARY 19, 2021

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Publication History

Revision	Author	Description
February 19, 2021	Kevin Brooks / Hilary Saltmarsh	▪ Commercial release.

SUMMARY

Intended Audience

The intended audience for this **Customer Release Notes** document is the RIS Administration team for all eRAD RIS customers.

This document describes the purpose, configuration, and operation of new features made available with this release, identifies issues resolved in the release, and highlights any unresolved known limitations.

This information should be used by all customers to determine how these changes affect their organization's workflow, and to plan their upgrade strategy for eRAD RIS.

> *There is a separate SERVICE RELEASE NOTES edition of this document for this release.*

Who Is Affected

The release of eRAD RIS v3.2021.2.15 introduces a new scheduling feature to search by distance and adds support for procedure plans to the EMR ordering workflow, along with other enhancements. Also, it delivers several performance enhancements related to database queries and materialized worklists and resolves a variety of other issues.

This version is recommended to be applied on eRAD RIS v3.2021.2.1 installations.

> *Please carefully review these release notes, even if your organization will not be upgraded immediately, to identify and communicate any issues that may affect your organization.*

NEW SETTINGS

System Configuration Settings

The following settings were added or updated with this release:

Setting	Value and Default	Purpose
DiagnosticReportPrintPreview	False	Value=Boolean, Default=[False] – When [True], one-click preview of diagnostic report in Print Layout mode is enabled. Added in v2021.2.15 #25170
EMRDeleteMessage	This study cannot be removed from the EMR order.	Value=String, Default=[This study cannot be removed from the EMR order.] – Hard stop message to display when attempting to delete the last EMR order row. When blank, the default message is used. Added in v2021.2.15 #26880

Access Strings Settings

The following settings were added or updated with this release:

Setting	Default	Purpose
Clinical.ScheduleSearch.IncludeUnavailable	None	Controls visibility of the "Include sites without availability" checkbox in Scheduling search results.
Clinical.ScheduleSearch.SortByDistance	None	Controls visibility of the "sort by distance" controls in Scheduling search results. When [Full] the sort radio buttons and distance filter dropdown are visible.

NEW FEATURES

Scheduling

Feature #26672 – New Scheduling Search option to search by distance

Summary

This enhancement updates the RIS Schedule Search feature to add the optional ability to order search results by approximate distance from the patient's location to the site, filtered by maximum distance. This enhancement also adds the option to display sites without availability in the results (i.e. sites capable of performing the exam, even though they have no availability per current search parameters).

These sorting and filtering preferences are configurable at the Schedule Group level.

WHEN SORTING BY FIRST AVAILABLE AND A ZIPCODE IS SPECIFIED, A COUNT OF RESULTS AND APPROXIMATE DISTANCE ARE DISPLAYED.

WHEN SORTING BY CLOSEST TO ZIP COLUMNS ARE ARRANGED BY APPROXIMATE DISTANCE.

Background

Previously, when displaying scheduling search results, RIS would only sort and display available time slots by "First available" on both Summary and Details tabs. When multiple locations offer the same initial timeslot, columns to the right are further ordered from right to left alphabetically by site code and then modality code.

Note that the previous related enhancement FEATURE #25938 – CONFIGURABLE DEFAULT TAB FOR SCHEDULING SEARCH RESULTS added the ability to set the preferred results tab (`Details` vs `Summary`) to display initially when presenting search results. That feature was released in version 3.2021.1.18.

Search by Distance

With this change, users with permissions can specify an originating zip code (or postal code; used interchangeably) and search results will be ordered by distance.

The zip code can be entered manually, or the zip for the patient's Primary Address or Secondary Address may be selected if available. The patient's primary zip will be entered by default.

The closest location will appear leftmost, and locations with the same distance are further ordered alphabetically by site code and then by modality code.

⚠️ *Note that regardless of the zip code, search results are filtered by* `Maximum search distance` *on both the Summary and Details tabs.*

Each displayed modality will indicate both a count of the number of available timeslots, and the "as the crow-flies" distance.

Note that because locations are identified by a zip code (and not a specific street address), distances are calculated as the straight-line distance from the center-point of the origin zip code to the center-point of the destination zip code (or exact latitude and longitude if specified in the Site Address), so they do not reflect the actual driving time or driving distance. This should be considered when configuring the maximum search distance, which may need to be increased to avoid excluding sites. There is not an additional cost associated when this approximate distance is used.

New preferences within the `ScheduleGroup` Lookup Table define default search behavior:

If a user belongs to multiple Schedule Groups, the settings from their primary/first Schedule Group will be used.

Filter Sites by Maximum Search Distance

Each schedule group can also define a `Maximum search distance` to filter the results displayed on **both** the Summary and Details tabs.

Default sorting for schedule search results	First available
Maximum search distance	500 ⏶⏷ miles
Default tab for schedule search results	Details

This is useful when scheduling groups include sites located far apart—it is unhelpful to offer an appointment at a facility 600 miles away.

Note that this distance filter is always applied when `Clinical.ScheduleSearch.SortByDistance` is enabled. Because users cannot override the distance, and distances are imprecise (measured from the geographic "center" of the zip code), it is important to set the maximum distances relatively high to prevent unintentionally filtering out results.

Display Sites Without Availability

Whether sorting by distance or not, there is a new option for users with permissions to `Include sites without availability`. When enabled, search results will include all sites with the capability to perform the exam even if the site has no availability based on the current search parameters. This prevents excluding geographically nearby sites which may be capable of performing the procedure at a different time.

For example, rather than selecting a site 40 miles away within the current week, the patient may prefer to select a site 2 miles away even though it has no available timeslots until the following month.

> ℹ️ *Availability is defined by sites configured with active procedures; it does not consider if they are configured with active hours.*

When sorting by first available and including sites without availability, any unavailable sites will display rightmost.

> ⚠️ *Note that regardless of availability, search results are filtered by `Maximum search distance` on both the Summary and Details tabs.*

Configuration Instructions

System Administrators must complete the following actions to enable this feature:

Changes to ScheduleGroup in the RIS Lookup Table Editor

- Define related preferences for each Schedule Group:
  - Default sorting for schedule search results.
  - Maximum search distance.
  - Default tab for schedule search results.

Changes to RIS Access String Settings

- Grant the following permissions as necessary:

Setting	Default	Purpose
Clinical.ScheduleSearch.IncludeUnavailable	None	Controls visibility of the "Include sites without availability" checkbox in Scheduling search results.
Clinical.ScheduleSearch.SortByDistance	None	Controls visibility of the "sort by distance" controls in Scheduling search results. When [Full] the sort radio buttons and distance filter dropdown are visible.

Feature #26880, #28039, #28862 – Enhancements to EMR Ordering Workflow

Summary

This enhancement to EMR Ordering process ensures continuity of EMR information from the order event through the scheduling event. It updates Wedge to add full support for procedure plans on EMR orders, resolves existing issues modifying and saving EMR orders, and makes the scheduling user interface easier to work with by automatically incrementing the order identifier when adding to an EMR order.

Background

Previously, Wedge had no special handling for procedure plan codes in EMR order messages. Incoming orders from EMR vendors who are not using our codes are using a compendium of our procedure codes and descriptions that we provide to crosswalk their codes to ours as they come in and out of the system.

RIS Procedure Plans on incoming EMR orders were not supported at all, and manually adding a RIS procedure plan could result in errors when saving the order.

It was possible to store additional procedures in connection with the EMR order, but only if the order was opened, updated, and then immediately scheduled, rather than being re-saved as an order.

The previous workflow for connecting multiple RIS procedures to an EMR order required using the Map EMR screen, however users found it problematic and were not utilizing it.

Feature Description

Wedge Support for Procedure Plans on EMR Orders (Feature #28862)

With this change, recognized procedure plans are expanded to relevant procedure codes. In the event the incoming code matches both a procedure and a procedure plan, the procedure will take precedence.

Multi-procedure EMR orders are also now handled correctly.

Matching Rule Logic

Currently, all EMR orders arrive on the Orders To Schedule worklist, including orders with unrecognized codes. When an incoming EMR procedure (or procedure plan) is not matched to a known RIS procedure code (exact code or by description) it is still accepted, but schedulers must replace it (using black X) to proceed with scheduling. These unrecognized procedures are differentiated by the addition of prefix of a practice identifier, e.g. a Comprehensive Care order on Orders To Schedule appears as ABC-123.

- If a caret "^" exists in the procedure description, it is expected that the first part is a code and the second part should be a description.
- Incoming codes that are not recognized are prefixed with the practice identifier (e.g. ABC-9998).

Match types are as follows:

- Requested code and description match a RIS Procedure Plan/Code and description exactly.
- Requested code matches RIS exactly and the RIS Procedure Plan/Code description partially matches the requested description.
- Procedure Code matches RIS exactly.
- Procedure Description partially matches a RIS Procedure Plan/Code description.

The matching rule logic will go through each type of match, starting with the most specific, for procedure code then procedure plan, then move to the next most specific match type. If a procedure plan/code does not match, then it will not be considered in the logic.

Improvements to EMR Ordering Workflow (Feature #26880)

Several changes to the scheduling screen have been made.

The existing issues modifying and saving EMR orders, as documented in BUG #26843 – BLANK ORDER AFTER CHANGING EMR PROCEDURE TO A PROCEDURE PLAN have now been addressed. That issue describes how removing a procedure from the procedure plan caused issues in the schedule order screen for EMR orders. Now, saving the EMR order with or without completing scheduling (i.e. re-save as an order) all values are preserved correctly and the relationship to the EMR order is preserved.

When an EMR order arrives, RIS continues to preserve the original incoming EMR order request by creating an "electronic referral" as a .pdf attachment in patient's chart for auditing purposes. Note that although the incoming procedure code may match a RIS procedure code, the exam description may not match ours. When the referral attachment is created, it will include whatever text was sent.

The existing "Map EMR" functionality was created to match EMR order items that arrived with generic text descriptions to procedure codes; however, this screen has never been used and has been removed.

RIS will now prevent manually adding any additional procedures to the EMR order. This would include moving a procedure between orders, e.g. from order "B" to EMR order "A". This does not prevent moving a procedure between non-EMR orders, e.g. from "B" to "C".

While RIS permits removing an EMR-ordered procedure (via red x), e.g. if the patient elects not to have it performed, RIS will now warn when attempting to remove all of the EMR-ordered procedures from the EMR order:
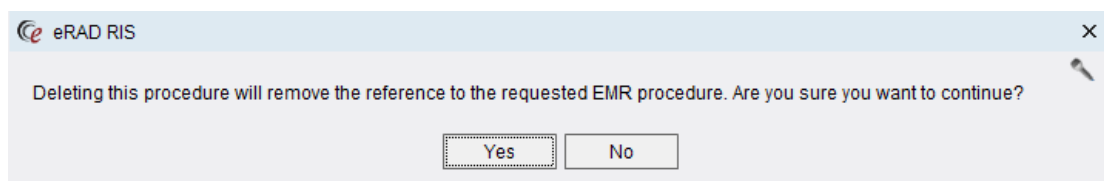
Auto-incrementing Order Identifier When Adding to EMR Order (Feature #28039)

This enhancement makes the scheduling user interface easier to work with by automatically incrementing the order identifier when adding to an EMR order. So, for example, when manually adding a procedure to an EMR order "A", RIS will now automatically increment the order identifier, adding the additional procedure as order "B".

Related Changes

The following related changes were also completed:

- Bug #26843 – Blank order after changing EMR procedure to a procedure plan.
- Bug #28378 – EMR orders do not update on OTS after changing the procedure code (resolved in RIS v3.2021.1.18)

Configuration Instructions

No Service Team actions are necessary to deploy this feature; however, optional configuration is available:

RIS Client

Changes to RIS System Configuration Settings

- Optionally customize the `EMRDeleteMessage` text.

The following related settings were added or updated:

Setting	Default	Purpose
EMRDeleteMessage	This study cannot be removed from the EMR order.	Value=String, Default=[This study cannot be removed from the EMR order.] – Hard stop message to display when attempting to delete the last EMR order row. When blank, the default message is used. Added in v2021.2.15 #26880

Radiology Reporting

Feature #25170 – Option to default diagnostic report preview to "Print Layout" view

Summary

This enhancement to Radiology Reporting introduces a fast (one click) access to a print layout view of the report that the radiologist is currently editing.

Previously, the preview had to first be opened, and then a second click was required to switch to print layout view.

With this change, a new `DiagnosticReportPrintPreview` RIS System Configuration setting will change the initial display mode to PrintPreview in the Report Preview.

Configuration Instructions

System Administrators must complete the following actions to enable this feature:

RIS Client

Changes to RIS System Configuration Settings

- Enable this feature by setting `DiagnosticReportPrintPreview` to `True`.

The following related settings were added or updated:

Setting	Default	Purpose
DiagnosticReportPrintPreview	Value=Boolean, Default=[FALSE]	When True, one–click preview of diagnostic report in Print Layout mode is enabled. Added in v2021.2.15 #25170

RESOLVED ISSUES AND KNOWN LIMITATIONS

Resolved Issues

This release resolves the following issues:

Redmine #	Subject
20117	Resolved Provider Account Page issue where the Authorized to order function was not working.
26843	Resolved EMR issue where removing a procedure from of an EMR requested procedure plan lost procedures.
27572	Resolved Localization issue to add localization support to tab names in the Patient tab.
28291	Resolved Walk-In issue where the Responsible Party would not populate for a new Schedule Order or Walk-In when opened from patient folder.
28497	Resolved Worklists issue where user's worklist indexes were not expiring.
28559	Resolved Provider Portal Home Screen issue where patients from inactive addresses were displayed.
28605	Resolved Insurance Eligibility issue with the eligibility response logic.
28736	Resolved Patient WF: Make Appointment issue where orders created in the Provider Portal that require UM could not be scheduled in the Patient Portal.
28783	Resolved Lookup Tables issue where saving changes to a lookup table could return a "conflicting changes" error.
28799	Resolved Patient General Display issue where the Patient Portal was not returning results.
28901	Resolved Radiology Reporting issue where switching to another tab before the Dictating screen fully loaded returned an error.
28922	Resolved Billing issue where opening the Billing Code tab from Perform Exam screen or View/Edit screen returned an error.
28933	Enhanced Database performance when querying scanned documents.
29058	Resolved Provider Orders Page issue where Orders with unknown insurance return an error when accessed.
29069	Resolved Provider Images issue where a newly created PACS User Account was not saved to the RIS database.
29089	Resolved Utilization Management issue where the UM clock continued running on the UM worklist but not within the UM screen.
29090	Resolved issue where the Descriptions for Inactive Follow-up Types did not display in RIS or Provider Portal.
29119	Resolved Patient Portal issue where Portals created verbal order scripts when configured not to.
29146	Resolved MRN issue where trying to reconcile a Patient Portal guest created appointment on View/Edit or Registration screen returned an error.
29153	Resolved Worklists issue where materialized worklists were not updating after patient merge.
29154	Resolved Provider Orders Page issue where Adding a new question in the Procedure Picker would hide the Next Button in the Portal.
29187	Resolved Patient WF: Make Appointment issue where questions for Procedure Plan Exams were not displaying in the Portal.
29189	Resolved Interfaces issue where Order Alerts icons may not appear when expected.

Redmine #	Subject
29195	Resolved Access strings issue to adjust description text.
29205	Resolved Provider Home Screen issue where exams from the previous two months were not displaying on the completed tab.
29249	Resolved Radiology Reporting issue where previewing the report from the Dictate window failed when the study had no previous interpretation.
29285	Resolved Worklists performance issue where sorting and filtering on large materialized worklists could be very slow.
29291	Resolved AUC issue where opening the AUC Rules lookup returned an error.

New Known Limitations

29287	Billing codes are not being attached at the time of scheduling or walk-in. This issue is resolved in version 3.2021.2.15.1.

VERSION DETAILS

Package Contents

The release package includes the following folders:

@Hotfixes	4/20/2012 8:51 AM
_Documentation	2/16/2021 5:50 PM
_ReleaseNotes	2/17/2021 11:57 AM
Client Application	2/16/2021 5:48 PM
DB	2/16/2021 5:48 PM
External WebAPI	2/16/2021 5:48 PM
Identity Service	2/16/2021 5:48 PM
Management Reports	2/16/2021 5:48 PM
RIS Service	2/16/2021 5:48 PM
Service Tools	2/16/2021 5:55 PM
Web Digital Forms	2/16/2021 5:49 PM
Web Patient Connect	2/16/2021 5:49 PM
Web Referring Connect	2/16/2021 5:50 PM
Web UM Connect	2/16/2021 5:50 PM
Build_2021.2.15.zip	2/16/2021 5:52 PM
RISServerMasterCert.pfx	3/31/2016 1:38 PM

Code Stream

The following source code branches have been merged into this release:
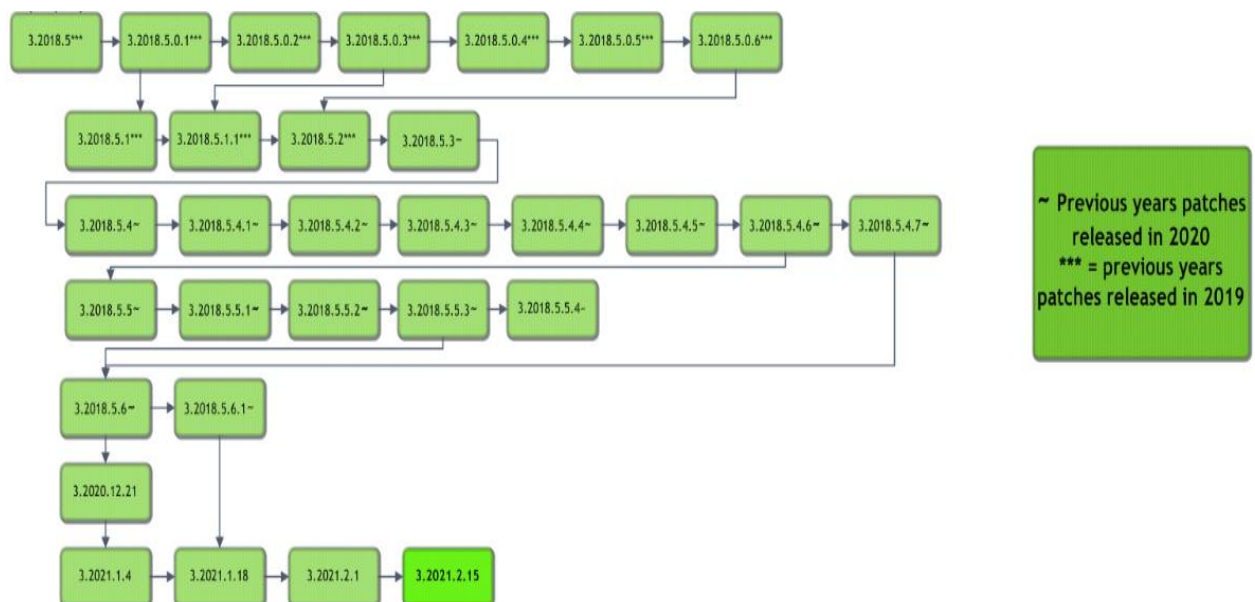
LEGEND:

Light Green = Previously Released software

Gray = Internal version, non-release version

Bright Green = Current Release

eRAD RIS Release Version Numbers

The following table details the version identifiers for components in this release:

Build	Patch	UI Version	Core Version	WS Version	DB Version	Digital Forms	Patient Portal	UM Portal	Provider Portal	Notes
2018.5	-	3.18.5(3GB)	3.18.5.0	3.18.5.0	3.18.5.0.0.01832865	3.18.5.0	3.18.5.0.0.822	3.18.5.0.0.822	3.18.5.0.0.822	Full Version Release. Including Patient, Provider and UM Portals
2018.5	.0.1	3.18.5.0.1(3GB)	3.18.5.0.1	3.18.5.0.1	3.18.5.0.1.01913234	3.18.5.0.1	3.18.5.0.1.874	3.18.5.0.1.874	3.18.5.0.1.874	GUI, Web Services, DB, Patient/Provider/UM Portals
2018.5	.0.2	3.18.5.0.2(3GB)	3.18.5.0.1	3.18.5.0.2						GUI, Web Services
2018.5	.0.3	3.18.5.0.3(3GB)	3.18.5.0.1	3.18.5.0.3	3.18.5.0.3.01972329	3.18.5.0.3	3.18.5.0.3.887	3.18.5.0.3.887	3.18.5.0.3.887	GUI, Web Services, DB, Digital Forms, Patient, Provider and UM Portals
2018.5	.0.4	3.18.5.0.4(3GB)	3.18.5.0.1	3.18.5.0.4	3.18.5.0.4.02023490	3.18.5.0.4	3.18.5.0.4.903	3.18.5.0.4.903	3.18.5.0.4.903	GUI, Web Services, DB, Digital Forms, Patient, Provider and UM Portals
2018.5	.0.5	3.18.5.0.5(3GB)								GUI
2018.5	.0.6	3.18.5.0.6(3GB)		3.18.5.0.6	3.18.5.0.6.02076323					GUI, Web Services, DB
2018.5	1	3.18.5.1.0(3GB)	3.18.5.1.0	3.18.5.1.0	3.18.5.1.0.01916269	3.18.5.1.0	3.18.5.1.0.878	3.18.5.1.0.878	3.18.5.1.0.878	GUI, Web Services, DB, Patient/Provider/UM Portals and Digital Forms
2018.5	1.1	3.18.5.1.1(3GB)	3.18.5.1.1	3.18.5.1.1	3.18.5.1.1.01983618	3.18.5.1.1	3.18.5.1.1.890	3.18.5.1.1.890	3.18.5.1.1.890	GUI, Web Services, DB, Patient/Provider/UM Portals and Digital Forms
2018.5	2	3.18.5.2.0(3GB)	3.18.5.2.0	3.18.5.2.0	3.18.5.2.0.02084897	3.18.5.2.0	3.18.5.2.0.924	3.18.5.2.0.924	3.18.5.2.0.924	GUI, Web Services, DB, Patient/Provider/UM Portals and Digital Forms
2018.5	3	3.18.5.3.0(3GB)	3.18.5.3.0	3.18.5.3.0	3.18.5.3.0.02174049	3.18.5.3.0	3.18.5.3.0.951	3.18.5.3.0.951	3.18.5.3.0.951	GUI, Web Services, DB, Patient/Provider/UM Portals and Digital Forms
2018.5	4	3.18.5.4.0(3GB)	3.18.5.4.0	3.18.5.4.0	3.18.5.4.0.02214458	3.18.5.4.0	3.18.5.4.0.961	3.18.5.4.0.961	3.18.5.4.0.961	GUI, Web Services, DB, Patient/Provider/UM Portals and Digital Forms
2018.5	4.1	3.18.5.4.1(3GB)		3.18.5.4.1						GUI and Web Service
2018.5	4.2	3.18.5.4.2(3GB)		3.18.5.4.2						GUI and Web Service
2018.5	4.3			3.18.5.4.3						Web Service
2018.5	4.4	3.18.5.4.4(3GB)	3.18.5.4.4	3.18.5.4.4	3.18.5.4.4.02297855		3.18.5.4.4.982			GUI, Web Service, DB and Patient Portal Updates
2018.5	4.5	3.18.5.4.5(3GB)	3.18.5.4.5	3.18.5.4.5	3.18.5.4.5.02314967	3.18.5.4.5	3.18.5.4.5.988	3.18.5.4.5.988	3.18.5.4.5.988	GUI, Web Service, DB and Patient, Referring and UM Portal Updates
2018.5	4.6	3.18.5.4.6(3GB)	3.18.5.4.6	3.18.5.4.6	3.18.5.4.5.02314967	3.18.5.4.5	3.18.5.4.5.996	3.18.5.4.5.996	3.18.5.4.5.996	GUI, Web Service, Patient, Referring and UM Portal Updates
2018.5	4.7			3.18.5.4.7						Web Services only
2018.5	5	3.18.5.5(3GB)	3.18.5.5	3.18.5.5	3.18.5.5.0.02404209	3.18.5.5	3.18.5.5.0.1019	3.18.5.5.0.1019	3.18.5.5.0.1019	Full version release
2018.5	5.1	3.18.5.5.1(3GB)	3.18.5.5.1	3.18.5.5.1	3.18.5.5.1.02460669	3.18.5.5.1	3.18.5.5.1.1023	3.18.5.5.1.1023	3.18.5.5.1.1023	GUI, Web Services, DB, Patient/Provider/UM Portals and Digital Forms
2018.5	5.2	3.18.5.5.2(3GB)								GUI
2018.5	5.3	3.18.5.5.3(3GB)	3.18.5.5.3	3.18.5.5.3	3.18.5.5.3.02479332					GUI, Web Services, DB
2018.5	5.4	3.18.5.5.4(3GB)	3.18.5.5.4	3.18.5.5.4	3.18.5.5.4.02587388					GUI, Web Services, DB
2018.5	6	3.18.5.6(3GB)	3.18.5.6	3.18.5.6	3.18.5.6.0.02571320	3.18.5.6.0	3.18.5.6.0.1050	3.18.5.6.0.1050	3.18.5.6.0.1050	Full version release
2018.5	6.1	3.18.5.6.1(3GB)	3.18.5.6.1	3.18.5.6.1	3.18.5.6.1.02601339	3.18.5.6.1	3.18.5.6.1.1070	3.18.5.6.1.1070	3.18.5.6.1.1070	GUI, Web Services, DB, Patient/Provider/UM Portals and Digital Forms
2020.12.21	-	3.20.12.21.0(3GB)	3.18.5.6	3.20.12.21.0	3.20.12.21.0.02608693	3.20.12.21.0	3.20.12.21.0.897	3.20.12.21.0.897	3.20.12.21.0.897	Full version release
2021.1.4	-	3.21.1.4.0(3GB)	3.21.1.4				3.21.1.4.0.1075	3.21.1.4.0.1075	3.21.1.4.0.1075	GUI and Patient/Provider/UM portals
2021.1.18	-	3.21.1.18.0(3GB)	3.21.1.18	3.21.1.18.0	3.21.1.18.002652234	3.21.1.18.0	3.21.1.18.0.1081	3.21.1.18.0.1081	3.21.1.18.0.1081	GUI, Web Services, DB, Patient/Provider/UM portals and Digital Forms
2021.2.1	-	3.21.2.1.0(3GB)	3.21.2.1	3.21.2.1.0	3.21.2.1.002672074	3.21.2.1.0	3.21.2.1.0.1090	3.21.2.1.0.1090	3.21.2.1.0.1090	GUI, Web Services, DB, Patient/Provider/UM portals and Digital Forms
2021.2.15	-	3.21.2.15.0(3GB)	3.21.2.15	3.21.2.15.0	3.21.2.15.002698266	3.21.2.15.0	3.21.2.15.0.1111	3.21.2.15.0.1111	3.21.2.15.0.1111	GUI, Web Services, DB, Patient/Provider/UM portals and Digital Forms