

Real World Testing Report- CY2024

Royal Solutions 5

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GENERAL INFORMATION

Report ID Number	
Developer Name	Royal Health, Inc
Product Name(s)	Royal Solution
Version Number(s)	5
Certified Health IT Product List (CHPL) ID(s)	15.04.04.2845.Roya.05.00.1.211229
Developer Real World Testing PLAN Page URL	https://info.royalsolutionsgroup.com/certifications

CHANGES TO ORIGINAL PLAN

Summary of Change	Reason	Impact
The b(10) criteria was certified during the year of 2023 and a measure has been added related to this one.	To comply with the ONC rule during 2023 the b(10) criteria was certified by the end of 2023.	The measure of this criteria will include data stored to determine the number of requests querying the database.

SUMMARY OF TESTING METHODS AND KEY FINDINGS

This is our second test report for CY 2024 real world testing for our certified EHR Royal Solutions product after learning from the first year. This document contains the test results for the real-world test plan document that describes our approach for conducting real world testing in CY 2024 and the testing measures we employed.

There are two testing methods that were employed: The first one is collecting data through our audit log or data stored in our database system for the different measures. We selected real customers based on their usage of the software and features that need to be measured to fully cover all aspects of the certified modules. It is important to note that there are still features that have not been adopted by our clients/users. In this case we use interactive methods, we test the feature in our production environment with our DEMO account that mimics a clinic account and workflow, and it is the most similar to a real scenario.

Our findings show that the certified features are working as expected. We did make some adjustment to the plan to include the new criteria (b)(10). The results show that some features are not used by our clients, especially the ones that rely on third party software as well as the relatively new measures g(10) and b(10).

Measure 1 found the adoption of sending/receiving CCDAs for transition of care is low in the radiology setting that are our main practices. It may be expected that the use of this feature stays low especially since FHIR protocol is being adopted more across the health industry.

Measure 2 found that there are no users utilizing CCDAs reconciliation functionality within the software. This is likely correlated with the low adoption of measure 1 by the same clinics.

Measure 3 shows that there is a minimal percentage of patients that view their CCDA. It is important to note that the main reason why patients log in the patient portal is to schedule/review appointments, view exam results, send secure messages to the providers, or pay bills.

Measure 4 found that clinics or third-party developers are not currently using the FHIR API access. We have not had any request for a third-party requesting access either. This is likely since this feature was available just 2 years ago and users are still learning about FHIR access.

Measure 5 found that clinics use Direct messages to distribute reports frequently high, but they don't have use cases or the need to receive Direct messages currently.

Measure 6 found that clinics do not use the feature related to Export EHI information. This feature was available at the end of the year 2023, and it seems the clinics don't have any use case yet to utilize this feature.

STANDARDS UPDATES (INCLUDING STANDARDS VERSION ADVANCEMENT PROCESS (SVAP) AND UNITED STATES CORE DATA FOR INTEROPERABILITY (USCDI))

For CY 2024 RWT testing, we did not do any SVAP updates.

Care Setting(s)

Our product is used for ambulatory settings and is primarily targeted for imaging centers. This is the main setting that was used for measuring the different metrics for this report.

Metrics and Outcomes

Measure 1: Interoperability: Transition of Care Send/Receive C-CDA

Measure	Interoperability: Transition of Care Send/Receive C-CDA		
Relied Upon software	EMR Direct		
Associated criterion(a)	170.315(b)(1)		
Outcomes	<p>The data was collected from our chosen clients that currently use EMR Direct. The following data was retrieved using logs information:</p> <ul style="list-style-type: none"> # Transition of Care documents (C-CDA document) sent: <table border="1"> <tr> <td>Practice3: 6</td> </tr> <tr> <td>Practice5: 5</td> </tr> </table> 	Practice3: 6	Practice5: 5
Practice3: 6			
Practice5: 5			

	<ul style="list-style-type: none"> # Transition of Care documents received: 12 <table border="1" style="margin-left: 20px;"> <tr><td>Practice3: 4</td></tr> <tr><td>Practice5: 3</td></tr> </table> # of Times the C-CDA validator was used: <table border="1" style="margin-left: 20px;"> <tr><td>Practice3: 2</td></tr> <tr><td>Practice5: 2</td></tr> </table> # of Times the C-CDA viewer feature was used to view a received C-CDA document: <table border="1" style="margin-left: 20px;"> <tr><td>Practice3: 5</td></tr> <tr><td>Practice5: 4</td></tr> </table> 	Practice3: 4	Practice5: 3	Practice3: 2	Practice5: 2	Practice3: 5	Practice5: 4
Practice3: 4							
Practice5: 3							
Practice3: 2							
Practice5: 2							
Practice3: 5							
Practice5: 4							
Challenges Encountered	Providers/staff do not use this feature too often because sending referrals to other providers is not a common task in imaging centers. Usually, the patient is referred to the imaging center for an exam. Regardless of the low adoption of this feature, the logs demonstrate that the HER system can create the C-CDA for the patient, as well as receive, view and validate the C-CDA.						

Measure 2: Interoperability: Transition of Care Send/Receive C-CDA

Measure	Clinical information and reconciliation
Relied Upon software	
Associated criterion(a)	170.315(b)(2)
Outcomes	Because our users do not reconcile clinical data using the C-CDA our results were 0. To verify the feature still works in a production environment, we set up and test this feature in our demo account with test patients. We imported some C-CDA and validate we were able to incorporate/reconcile problems, medications, and data from them.
Challenges Encountered	Our clinicians do not receive many C-CDAs from other providers and then they don't use the reconciliation feature for problems, medications, and allergies.

Measure 3: View, download, and transmit C-CDA to 3rd party by the patient or authorized representative.

Measure	View, download, and transmit C-CDA to 3rd party by the patient or authorized representative
Relied Upon software	EMR Direct
Associated criterion(a)	170.315(e)(1)
Outcomes	The data was collected from some of the clients that have patient portal product. The following data was retrieved using logs information from the patient portal.

Challenges Encountered	<ul style="list-style-type: none"> # Patient that login in the patient portal: <table border="1" style="margin-left: 20px;"> <tr><td>Practice1: 121299</td></tr> <tr><td>Practice2: 21203</td></tr> <tr><td>Practice3: 49245</td></tr> <tr><td>Practice4: 39665</td></tr> <tr><td>Practice5: 186785</td></tr> </table> # of times C-CDA was viewed: <table border="1" style="margin-left: 20px;"> <tr><td>Practice1: 233</td></tr> <tr><td>Practice2: 272</td></tr> <tr><td>Practice3: 147</td></tr> <tr><td>Practice4: 753</td></tr> <tr><td>Practice5: 3</td></tr> </table> # of times C-CDA was downloaded: <table border="1" style="margin-left: 20px;"> <tr><td>Practice1: 1</td></tr> <tr><td>Practice2: 0</td></tr> <tr><td>Practice3: 4</td></tr> <tr><td>Practice4: 8</td></tr> <tr><td>Practice5: 2</td></tr> </table> # of times C-CDA was transmitted (secure or unsecure): <table border="1" style="margin-left: 20px;"> <tr><td>Practice2: 1</td></tr> <tr><td>Practice3: 2</td></tr> <tr><td>Practice5: 1</td></tr> </table> 	Practice1: 121299	Practice2: 21203	Practice3: 49245	Practice4: 39665	Practice5: 186785	Practice1: 233	Practice2: 272	Practice3: 147	Practice4: 753	Practice5: 3	Practice1: 1	Practice2: 0	Practice3: 4	Practice4: 8	Practice5: 2	Practice2: 1	Practice3: 2	Practice5: 1
	Practice1: 121299																		
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Practice4: 8																			
Practice5: 2																			
Practice2: 1																			
Practice3: 2																			
Practice5: 1																			
<p>The results demonstrate that the patient can login and view the C-CDA using the patient portal. The results show that most patients just view the data without using the download or/and the transmit feature. The results show that still for most practices the feature of view/download/transmit the C-CDA is not used often by patients that logged in the portal. This could be explained because the main actions for the patient portal are to schedule/view appointments, send messages, pay bills, and to check test results by the patients.</p>																			

Measure 4: Use of API to access patient data.

Measure	Use of API to access to patient data
Relied Upon software	EMR direct
Associated criterion(a)	170.315(g)(7), 170.315(g)(9) , 170.315(g)(10) ,
Outcomes	Royal Solutions EHR has had zero user adoption of the available API and FHIR API currently hence data for this measure could not be collected. To test the functionality of the API, we test in our PRODUCTION environment with our DEMO account.

	We tested the feature using the Inferno Standardized API Test Kit and our DEMO account and confirm that the data was returned successfully for the patient.
Challenges Encountered	At the end of the year 2022, Royal Health certified for the criteria §170.315(g)(10) Standardized API for patient and population services. This feature is still new and with more adoptability of the FHIR services we expect that the following years is used more by our users. There are not any applications that access data from our API. We have not been contacted by any 3d Party App developer requesting to connect to our APIs

Measure 5: Use of Direct Project

Measure	Frequency of utilization of Direct Project.						
Relied Upon software	EMR direct						
Associated criterion(a)	170.315(h)(1)						
Outcomes	<p>The data was collected from our chosen clients that currently use EMR Directo for Direct Messages. The following data was retrieved using the log tables.</p> <ul style="list-style-type: none"> # of Direct Messages Sent: <table border="1" data-bbox="673 955 912 1033"> <tr><td>Practice3: 14362</td></tr> <tr><td>Practice5: 13850</td></tr> </table> # of Direct Messages Delivered: <table border="1" data-bbox="673 1102 912 1180"> <tr><td>Practice3: 13240</td></tr> <tr><td>Practice5: 13371</td></tr> </table> # of Direct Messages Failed: <table border="1" data-bbox="673 1249 912 1327"> <tr><td>Practice3: 1122</td></tr> <tr><td>Practice5: 479</td></tr> </table> <p>From the results we can see that these two practices use frequently Direct messages to send messages. The rate for practice3 is 92% and for practice5 is 96% success of messages delivered.</p>	Practice3: 14362	Practice5: 13850	Practice3: 13240	Practice5: 13371	Practice3: 1122	Practice5: 479
Practice3: 14362							
Practice5: 13850							
Practice3: 13240							
Practice5: 13371							
Practice3: 1122							
Practice5: 479							
Challenges Encountered	The two practices that have enabled Direct messages send Direct messages, but they do not use the option to receive Direct messages besides the Transition of Care feature that was evaluated in the first measure.						

Measure 6: Analysis of EHI Export feature.

Measure	EHI Export Data
Relied Upon software	
Associated criterion(a)	170.315(b)(10)

Outcomes	This feature has not been used by any of our users according to the logs. To test this functionality, we use our PRODUCTION environment with our DEMO account. We tested the options: export specific patient data and exporting all the patient population and reviewed the data was generated.
Challenges Encountered	At the end of the year 2023, Royal Health certified for the criteria §170.315(b)(10) EHR Export data. This feature is the latest one added to our system for the certification and still new for the clients that probably resulted in low adoptability.

SCHEDULE OF KEY MILESTONES

Key Milestone	Date/Timeframe
Identify Clients to Participate where it is applicable	Q2 2024
Create queries that will be used for the metrics and test with internal data.	Q3 2024
Data Collection	Q2-Q4 2024
Analysis and report creation	Q4 2024
Submit Real World Testing report	Q1 2025