Real World Testing Report- CY2023
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://www.royalsolutionsgroup.com/web/company/certifications.aspx

Developer Real World Testing RESULTS Page URL	https://www.royalsolutionsgroup.com/web/company/certifications.aspx

CHANGES TO ORIGINAL PLAN

Summary of Change	Reason	Impact
The g(8) criteria was withdraw to be replaced by g(10) criteria.	To comply with the ONC rule during 2022 the g(8) criteria was withdrawn and replaced by the g(10) criteria that was certified by the end of 2022.	The measure of the analysis of the use of the API for patient access will include the logs for the use of the FHIR API for data category and access that is newest g(10) criteria certified. This criteria g(10) uses a third product party called EMR Direct. There was not data captured by g(8) during this year.

SUMMARY OF TESTING METHODS AND KEY FINDINGS

This is our first test report for CY 2023 real world testing for our certified EHR Royal Solutions product. This document contains the test results for the real-world test plan document that describes our approach for conducting real world testing in CY 2023 and the testing measures we employed.

There are two testing methods that were employed: The first one is collecting data through our audit log tables from our system for the different measures. For this we selected real customers based on their usage of the software and their features that need to be measured to fully cover all aspects of the certified modules. Second, for features that have not been adopted by our clients we use interactive methods, that means we test the feature in our production environment with our DEMO account that mimics a clinic account and workflow.

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

Measure 1 found the practices are sending/receiving CCDAs for transition of care rarely and in few cases since there is not a lot of use cases in their workflow.

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

Measure 3 shows that around 10-25% of the patients view their CCDA but download or transmitting their data remains to be low.

Measure 4 found that clinics or third-party developers are not currently using the FHIR API access. This finding was expected as this is a relatively new certified criteria and the industry has not yet adopted all the new features.

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.

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

For CY 2023 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	The data was collected from our chosen clients that currently use EMR Direct. The following data was retrieved using logs information: • # Transition of Care documents (C-CDA document) sent: Practice3: 3 Practice5: 8 • # Transition of Care documents received: 12 Practice3: 9 Practice5: 3 • # of Times the C-CDA validator was used: Practice3: 10

	Practice5: 2 • # of Times the C-CDA viewer feature was used to view a received C-CDA document: Practice3: 5 Practice5: 3
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: • # Patient that login in the patient portal: Practice1:105122 Practice2: 10424 Practice3: 43272 Practice4: 40915 Practice5: 145707

	• # of times C-CDA was viewed: Practice1: 16 Practice2: 2495 Practice3: 11 Practice4: 4934 Practice5: 3 • # of times C-CDA was downloaded: Practice1: 1 Practice2: 3 Practice3: 5 Practice4: 6 Practice5: 1 • # of times C-CDA was transmitted (secure or unsecure): Practice3: 5 Practice4: 1 Practice5: 3 The results demonstrate that the patient can login and view the C-CDA using the patient portal. The results show that most patients preferred to view the data and do not download or exchange the data. The viewing feature is the most used one. The results show that still for most practices the feature of view/download/transmit the C-CDA is still used by less than 25% from all the patients that logged in the portal, and this is probably expected since the main use for the patient portal is to review appointments, and to review test results.
Challenges Encountered	

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 search patient, get the full data C-CDA for a patient, and request different FHIR resources for a single patient in 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 and in doing so replaced § 170.315 (g)(8) Application access data category request. So, the test plan was modified to test the FHIR API 170.315(g)(10) criteria instead of 170.315 (g)(8).

	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	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. • # of Direct Messages Sent: Practice3: 14261 Practice5: 15742 • # of Direct Messages Delivered: Practice3: 13239 Practice5: 15176 • # of Direct Messages Failed: Practice3: 1022 Practice5: 566 From the results we can see that these two practices use frequently Direct messages to send messages. The rate for practice3 is 93% and for practice5 is 99% success of messages delivered.
Challenges Encountered	The two practices that have enabled Direct messages only send Direct messages, but they not use the option to receive Direct messages besides the Transition of Care feature that was evaluated in the first measure.

SCHEDULE OF KEY MILESTONES

Key Milestone	**Date/Timeframe**
Identify Clients to Participate where it is applicable	Q2 2023
Create queries that will be used for the metrics and test with internal data.	Q2 2023
Data Collection	Q2-Q4 2023

Analysis and report creation	Q4 2023
Submit Real World Testing report	Q1 2024