Royal Solutions Group, LLC

Real World Testing Plan 2024

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GENERAL INFORMATION

Developer Name: Royal Health, Inc

Product Name: Royal Solutions

Version Number: 5

Certified Health IT Product List (CHPL) ID: 15.04.04.2845.Roya.05.00.1.211229

Developer Real World Testing Plan Page URL:

https://info.royalsolutionsgroup.com/certifications

JUSTIFICATION

Royal Health Inc has a certified EHR technology platform "Royal Solutions 5". The system will be tested in real case scenarios for ambulatory settings using the testing plan below for compliance and to maintain the certification issued by ONC. Our Real World Test (RTW) Plan includes using live practices, structured patient data, and querying the system logs and tables to document the utilization of the certified functionalities. When a certified feature has not been adopted by any of our clients, production test scenarios in a demo account will be used to test these functionalities. All testing will be performed in ambulatory clinic settings, that is the setting in which the systems is used.

STANDARD UPDATEDES: STANDARDS VERSION ADVANCEMENT PROCESS (SVAP) AND UNITED STATES CORE DATA FOR INTEROPERABILITY (USCDI))

Standard (and version)	NA
Updated certification criteria and associated product	NA
Method used for standard updated	NA
Date of ONC ACB notification	NA
Date of customer notification (SVAP only)	NA
USCDS updated certification criteria (and USCDI version)	NA

MEASURES USED IN OVERALL APPROACH

Measurement/Metric	**Interoperability: Transition of Care C-CDA sent/received**
Description of the measure	This measure will analyze the activity of the functionality Transition of Care. The following metrics will be generated by querying the system logs: • # of Transition of Care documents sent that contains a CCD or Referral Note (C-CDA document).

	• Number of messages received that contains TOC documents. • Number of times that the C-CDA validator was used to validate an incoming C-CDA. • Number of times that a received CCD document was opened and viewed in human readable format using the C-CDA viewer feature.
Associated Certification Criteria	§170.315(b)(1) Transitions of Care
Justification	The system includes the transition of care functionality that allows a provider to send and receive a Transition of Care (Referral or CCD). Once the CCD document is received, this can be validated and viewed in human readable format. The system registers every time the user sends/receives a Transition of Care and views/validates the document. These metrics will demonstrate the use of the function Transition of Care that is working in production.
Relied upon software.	EMR direct.
Expected outcome	It is expected that providers can send and receive Transition of Care as well as validate and view in human readable format the received C-CDA (CCD or Referral Note). The number of sent/received Transition of Care containing a C-CDA document should be greater than 0 and will provide the frequency of use of the feature. We expect that the number of C-CDA send and received is not high due this feature being recently adopted for a few clients. We expect that this measure establishes a historic baseline of the utilization of this feature for future real word testing plans for the following years.

Measurement/Metric	**Analysis of clinical information reconciliation and incorporation**
Description of the measure	This measure will count how many times a C-CDA document is imported, and the patient data

	(allergies, problems, and medications) is reconciled using the reconciliation tool. The system will create an entry in the database every time a user reconciles and incorporates the clinical information to the patient chart. For this metric the database table will be queried to find the number of times a reconciliation has been performed in the system. This feature is not currently used by our clients. If during the test period there are still no clients that have adopted this feature, we will use a demo account in the production environment to enter test cases to receive and reconcile C-CDA documents to prove this is working in production environment.
Associated Certification Criteria	§170.315(b)(2) Clinical Information and reconciliation
Justification	This metric will show that the system has the capability to reconcile and incorporate the clinical information in the patient record.
Expected outcome	The metric should be a numeric value and will demonstrate that a C-CDA is incorporated and reconciled using the system. This feature is not currently adopted so the metric value should match to the number of manual test cases used for this metric.

Measurement/Metric	**Number of View, Download and Transmit to 3rd Party of C-CDA by the patient or authorized representative**
Description of the measure	The patient portal will track in the system logs when a patient login occurs in the patient portal, views his/her data, and uses the features: view, download, or transmit of the C-CDA document. The metrics will count the number of times that a patient views, downloads, or transmit his/her data. The following metrics will be generating querying the system logs: • Number of patients that login in the portal • Number of times a CCD document was viewed. • Number of times a CCD document was downloaded • Number of times a CCD document was

	transmitted (Secure or insecure)
Associated Certification Criteria	§170.315(e)(1)
Relied upon software	EMR Direct
Justification	The metric will reflect the activity in the patient portal to login and use of the features view, download and transmit of the data by a patient.
Expected Outcome	The metric will be numeric values and will show the frequency of when a patient view, download, or transmit the C-CDA. It is expected that the number of views of a C-CDA will be greater than the number of download or transmit the C-CDA since the patient or authorized representative will view the C-CDA document first and then download or transmit. The metrics is not expected to be high since these features are not the main features of the patient portal that are used by our patients.

Measurement/Metric	**Analysis of the use of Application Access Patient Data**
Description of the measure	Number of request calls to the API to search patient and retrieve a full CCDA data. The metric will query the system logs to get the information regarding: • Number of API calls for patient selection (patient search) • Number of API requests to retrieve full data of the C-CDA.
Associated Certification Criteria	§170.315(g)(7) §170.315(g)(9)
Justification	This measure will verify that third party applications can use the public API to retrieve all USCDI classes (returning a CCDA format) defined by the (g)(9) criterion. If no requests are made to confirm all the features, proper functionality will be determined through test scenarios. These metrics will show that the different API requests are working in the production environment.

Expected Outcome	It is expected that the analysis of the logs shows proper responses to the API requests made by external client applications or test scenarios that make API requests. The metrics is not expected to be high due has not been adopted widely by the clients.

Measurement/Metric	**Analysis of the use of FHIR API**
Description of the measure	Number of request calls to the FHIR API to retrieve a FHIR resource (data category). The metric will query the system logs to get the information regarding: • Number of FHIR API requests for different FHIR resources for single patient token. • Number of FHIR API requests for multi-patient tokens.
Associated Certification Criteria	§170.315(g)(10)
Relied upon software	EMR Direct
Justification	This measure will demonstrate patient ability to connect with an approved app using FHIR R4 standard. If no requests are made to confirm application access due low adoptability, proper functionality will be determined through engaging with an interoperability test platform to demonstrate that the certified feature works properly in the production environment.
Expected Outcome	It is expected that the analysis of the logs shows proper responses to the FHIR API requests made by external client applications or test scenarios that make FHIR API requests. Transitioning to a standardized API for requesting access to records will increase requests to access records. However due to g(10) was certified/implemented during the end of 2022 and currently has not been adopted by any of our clients the metrics is not expected to be high during 2024.

Measurement/Metric	Frequency of utilization of Direct Project
Description of the measure	Number of messages sent/received using the Direct SMTP protocol.
Associated Certification Criteria	§170.315(h)(1)
Relied upon software	EMR Direct
Justification	The system tracks in the internal logs when the user send messages using the Direct protocol to exchange health information. Using and analyzing the logs we will count the number of messages sent and received using Direct protocol that has been tracked in the system logs. This metric will demonstrate that the functionality for exchange health information through Direct protocol is working in production environment.
Expected Outcome	This metric will be numeric values showing the number of messages and frequency of messages sent and received using Direct Protocol.

CARE SETTING(S)

Care Setting	Justification
Outpatient Radiology and Hospital Radiology.	The certified system is used in ambulatory settings only. The outpatient radiology and hospital radiology are the most common setting that the system is used.

SCHEDULE OF KEY MILESTONES

Key Milestone	Date/Timeframe
Test Plan Submission	September 28, 2023
Identify Clients to Participate where it is applicable	Q1/Q2 2024
Create queries that will be used for the metrics and test with internal data.	Q1/Q2 2024
Data Collection	Q2-Q4 2024
Analysis and report creation	Q4 2024
Submit Real World Testing report to ACB	Q1 2025

ATTESTATION

This Real-World Testing plan is complete with all required elements, including measures that address all certification criteria and care settings. All information in this plan is up to date and fully addresses the health **IT developer's Real World Testing requirements.**

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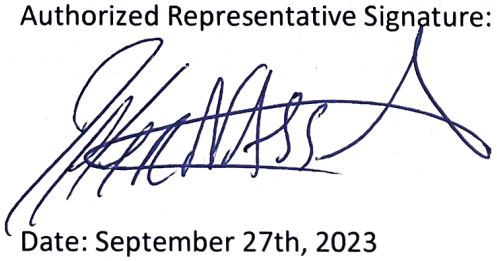

Date: September 27th, 2023