Indian Health Service (IHS)

Resource and Patient Management System | Electronic Health Record

Application Access

Real World Test Results & Report 2022

January 13, 2023

Contents

GENERAL INFORMATION

The information in this RWT results report is organized by specific criteria included in the **Application Access** category. This report contains sections that explain/clarify how the RWT approach addressed each required element in the Real World Testing Plan. Use cases were executed by our Test sites utilizing the 2015 Resource and Patient Management System (RPMS) Electronic Health Record (EHR) at their respective care settings. Measures and metrics were gathered related to each use case scenario to demonstrate successful interoperability and use of the 2015 RPMS EHR.

Plan Report ID Number:	20211111IND
Developer Name:	The Indian Health Service
Product Name	Resource and Patient Management System Electronic Health Record (RPMS Suite (BCER))
Version Number	BCER v6.1 (current), v4.1, v5.0 and v6.0 (previous)
Certified Health IT Product List (CHPL) ID	15.02.05.1673.RPMS.01.04.1.220302 (current) 15.02.02.1673.A116.02.03.1.211001 (previous)
Developer Real World Testing Plan and Results Page URL	https://www.ihs.gov/promotinginteroperability/certificationoverview/real-world-testing/

The IHS has combined similar criterion that falls within the definition of this specific APIs category, which includes:
- §170.315(g)(7), Application access — patient selection
- §170.315(g)(8), Application access — data category request
- §170.315(g)(9) Application access — all data request.

APIs simplify software development and innovation by enabling applications to exchange data and functionality easily and securely.

USE CASE 1: §170.315(g)(7-9) Application Access

The IHS has developed an API that receives a request from another software component/service with enough information about a patient to identify the patient and returns a unique token. The Health IT Module's API will use that token to respond to category data subsets or a full set of data requests for each data category during a specified timeframe within an Ambulatory and Inpatient setting.

CHANGES TO ORIGINAL PLAN

IHS sought out sites to participate in RWT efforts. All sites that participated were volunteers. Numerous efforts were made for recruiting sites, including announcements in IHS Area meetings, ListServ announcements, and direct contact with sites. Although our efforts were extensive, we received no participation with a limited number of sites. All of our participating sites had fully deployed the 2015 RPMS EHR with the complete functionality to demonstrate this criterion, however, a Real World Scenario did not occur during Calendar Year 2022 at any of the participating RWT sites. Therefore, this criterion falls into "Low Adoption Capabilities" and was tested on the developer database with synthetic data.

SUMMARY OF TESTING METHODS AND KEY FINDINGS

The RWT method was to execute the functions users performed to demonstrate interoperability for the following activities:

- (g)(7) Receive a request with sufficient information to uniquely identify a patient and return a token that can be used by an application to subsequently execute requests for that patient's data.
- (g)(8) Respond to categories of data that are subsets of the entire record including: Patient Demographics, Medications, Med Allergies, Lab Tests/Results, Procedures, etc., within a specified timeframe.
- (g)(9) Respond to a full set of data requests for each data category using the unique token specified in the United States Core Data for Interoperability (USCDI) in a summary record within a specified timeframe.

Due to a lack of requests from an outside developer, we were faced with the challenge of demonstrating this in a Real-World Scenario. As a result, we demonstrated this by utilizing synthetic patient data in a mirror production environment.

System logs were reviewed to determine the frequency for API usage by patients for accessing their data through the API. These system logs were used to validate the proper operation of the transport mechanisms and for the calculation of the metric. The RWT methodology demonstrated conformance of the system. As part of the RWT effort for CY 2022, no errors were discovered for this criterion.

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

This criterion was certified with voluntary SVAP or USCDI standards.

Standard (and version)	§ 170.213 USCDI v1
Updated certification criteria and associated product	(g)(9): Application Access - All Data Request
CHPL Product Number	15.02.05.1673.RPMS.01.04.1.220302
Conformance measure	Measure 3: §170.315(g)(9) - Application Access (all data request)

CARE SETTING(S)

This criterion was tested for both ambulatory and inpatient settings. The testing was done to obtain one metric that included interoperability for both settings.

METRICS AND OUTCOMES

IHS is a Federal Health IT developer that serves Federal, Tribal, and Urban Health Care facilities. Deployment and implementation of the certified 2015 RPMS EHR is verified utilizing IHS Certified Electronic Record Checker (BCER). The verification of either BCER v4.1, 5.0 or 6.0 ensures that our volunteered testing facilities are:

1. Compliant with the certification criteria, including the required technical standards and vocabulary code sets;
2. Exchanging electronic health information (EHI) in the care and practice settings for which it is marketed for use; and/or,
3. EHI is received by and used in the certified health IT.

Measurement/ Metric	Associated Criterion(a)	Relied Upon Software	Outcomes	Challenges Encountered
Measure 1: §170.315(g)(7) - Application Access (Patient selection)	§170.315(g)(7) Application access — patient selection (i) Receive a request with sufficient information to uniquely identify a patient and return a unique token, which can be used by an application to subsequently execute requests for that patient's data.	N/A	213 tokens were successfully generated out of 216 requested. The three failures were resulted by a negative test. Authentication was not achieved due to a mismatch of information. This is to be expected if there was a failure to authenticate properly.	N/A

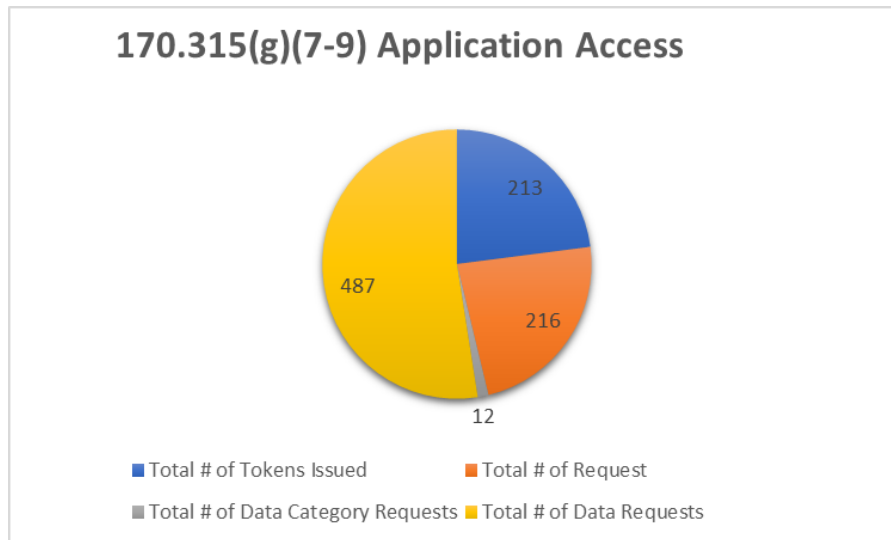| Measurement/ Metric	Associated Criterion(a)	Relied Upon Software	Outcomes	Challenges Encountered
Measure 2: §170.315(g)(8) - Application Access (data category request)	§170.315(g)(8)- Application Access (data category request) (i)(A) Respond to requests for patient data (i)(B) Respond to requests for patient data categories associated with a specific date	N/A	12 requests for patient data categories were successfully returned based on Common Clinical Data Set (CCDS) standards for the requested data category.	N/A
Measure 3: §170.315(g)(9) - Application Access (all data request)	§170.315(g)(9) Application access — all data request (i)(A) Respond to requests for patient data (i)(B) Respond to requests for all patient data requests associated with a specific date	N/A	487 requests for patient data categories were successfully returned based on Common Clinical Data Set (CCDS) standards for the requested data category.	N/A

Chart 1: Application Access

170.315(g)(7-9) Application Access

213
216
12
487

■ Total # of Tokens Issued   ■ Total # of Request
■ Total # of Data Category Requests   ■ Total # of Data Requests

Chart 2: Application Access – Patient Selection

170.315(g)(7)
Application Access

	Total # of Requests	Total # of Tokens Issued
■ Patient Selection	216	213
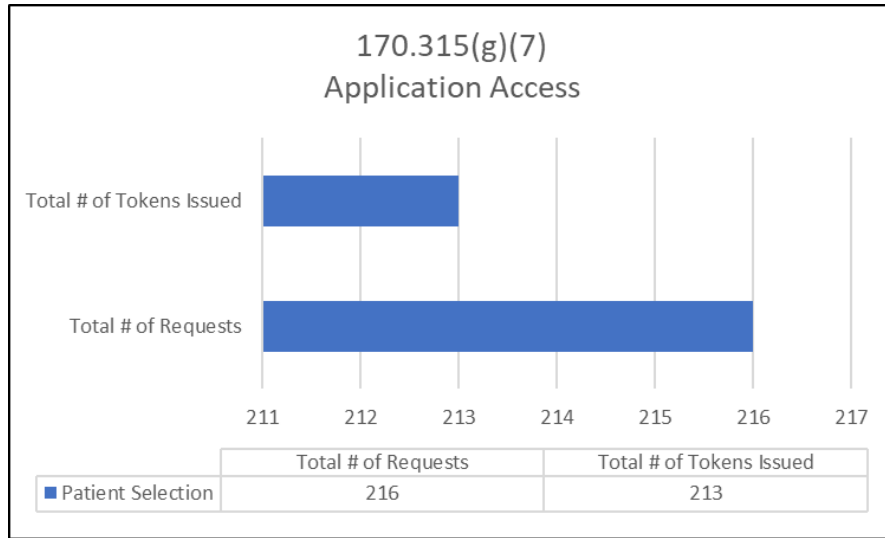
Chart 3: Application Access – Data Category Request

170.315(g)(8) Application Access

	Total # of Data Category Requests
■ # of Data Categories Requested using an Issued Token	12
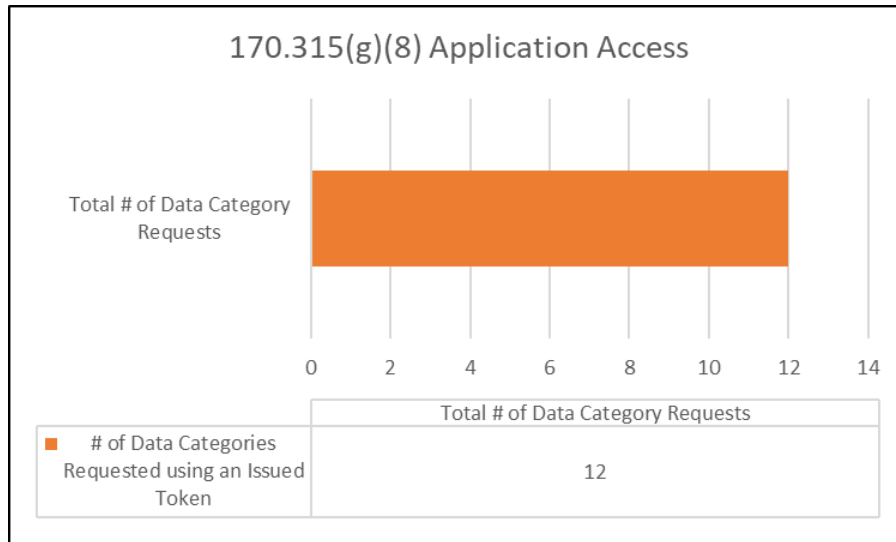
Chart 4: Application Access – All data request

170.315(g)(9)
Application Access

	Total # of Data Requests
■ # of all Data Requests using an Issued Token	487
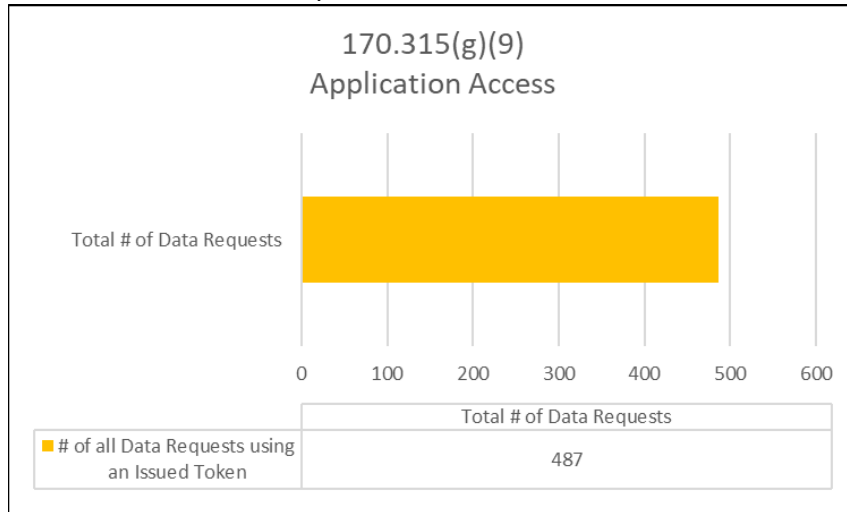
KEY MILESTONES

Real World Testing Key Milestones were met as indicated below.

Key Milestone	Care Setting	Date/Timeframe
Initial outreach for site participation.	Ambulatory/Inpatient	October 15, 2021
Release of documentation for the Real World Testing to be provided to authorized representatives/participants and providers. This includes surveys, specific instructions on what to look for, how to record issues encountered, and Customer Agreements.	Ambulatory/Inpatient	December 15, 2021
Begin collection of information as laid out by the plan for the period.	Ambulatory/Inpatient	January 5, 2022
Planned System updates to allow for collection of data any updates.	Ambulatory/Inpatient	Quarterly, 2022, as needed
Follow-up with authorized representatives/participants and providers on a regular basis to understand any issues arising with the data collection.	Ambulatory/Inpatient	Quarterly, 2022
End of Real World Testing period/participants submit final collection of all data for analysis as real-world testing results to IHS.	Ambulatory/Inpatient	December 31, 2022
Analysis and Real World Testing result report creation.	Ambulatory/Inpatient	January 12, 2023
Real World Testing results submission to ACB.	Ambulatory/Inpatient	January 15, 2023

ATTESTATION

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

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