

REAL WORLD TESTING RESULTS REPORT – EMA



INTRODUCTION

This document contains a list of the steps taken to conduct the annual Real World Testing requirements for ONC certification. The Results within this document were reviewed as screenshots and spreadsheets for their compliance with the criteria defined in the test plan. These artifacts will be maintained by the health IT developer for audit purposes or further requests.

GENERAL INFORMATION

Plan Report ID Number: [For ONC-Authorized Certification Body use only]

Developer Name: Modernizing Medicine

Product Name(s): EMA

Version Number(s): 5.20; 5.21; 5.22; 5.23; 5.24; 5.25; 5.26. 5.27, 6.0

Certified Health IT Product List (CHPL) Product Number(s):

15.04.04.2002.EMA5.20.09.0.200825; - 5.20

15.04.04.2002.EMA5.21.10.0.210119; - 5.21

15.04.04.2002.EMA5.22.11.0.210216; - 5.22

15.04.04.2002.EMA5.22.12.0.210510; - 5.23

15.04.04.2002.EMA5.22.13.0.210510; - 5.24

15.04.04.2002.EMA5.25.14.0.210927; - 5.25

15.04.04.2002.EMA5.26.15.0.211209; - 5.26

15.04.04.2002.EMA5.27.16.0.220328; - 5.27

15.04.04.2002. EMA 6.60.17.0.220328-6.0

Developer Real World Testing Plan Page URL: https://www.modmed.com/2015-edition-cures-act-update/

WITHDRAWN PRODUCTS

The following EMA versions were withdrawn the past year and were previously included in their Real World Testing plan:

Product Name(s):	EMA
Version Number(s):	5.20; 5.21; 5.22; 5.23; 5.24; 5.25; 5.26; 5.27, 6
CHPL Product Number(s):	See above
Date(s) Withdrawn:	2022-2023
Inclusion of Data in Results Report: [Provide a statement as to whether any data was captured on the withdrawn products. If so, this data should be identified in the results report.]	Yes, data was captured on the withdrawn old EMA versions. EMA is cloud based and all providers were upgraded to v6 at the beginning of 2022. The numbers presented in this document reflects v6 (which contains previous versions).



SUMMARY OF TESTING METHODS AND KEY FINDINGS

Consistent with the ONC's recommendation that "Real World Testing verify that deployed Certified Health IT continues to *perform as intended by conducting and measuring observations of interoperability and data exchange*", our original test plan focused on capturing and documenting the number of instances that certified capability was successfully utilized in the real world. In instances where no evidence exists due to low or zero adoption of a certified capability or the inability to capture evidence of successful use for other reasons, we tested and demonstrated the required certified capability in a semi-controlled setting as close to a "real world" implementation as possible.

As per the test plan, we leveraged a 3-fold approach to demonstrate successful real-world implementations.

- Adoption Rate
- Summative Testing
- Interactive Testing

Adoption rate was used to determine if/when certified capability is being used in the real world and to help identify differences in care settings. Evidence of high rates of implementation and usage indicate (but don't by themselves prove) a certified capability's usefulness and practical value. Evidence of low rates of implementation and usage might be accounted for by patient volume, location or provider preference among other reasons. Note, it is not the goal of this exercise to identify the individual causes of why a given certified capability may have a high or low adoption rate, but rather to identify the users and care settings for which a given test is relevant.

Summative assessments were used to measure which certified actions were performed at the conclusion of a given time period where the minimum time period was 90 days and longer where possible. These results are typically obtained by generating reports and examining audit logs from within the certified health IT module to help demonstrate the frequency of actions within the given time frame, and where possible, whether those actions were successful or unsuccessful. High success rates should be an indicator of a successful implementation of a given certified capability in a real-world setting.

Interactive testing was used to demonstrate conformance to requirements where the adoption rate of a given certified capability is zero and to demonstrate ongoing compliance with updated standards and code sets (SVAP). Interactive tests were live tested as opposed to examining historical usage statistics. The goal being to demonstrate the certified Health IT module being used in a way consistent within a practice or care setting.

This approach allowed for the successful testing and obtaining results for each criterion. Detailed below in the **Metrics** and **Outcomes** section the reader will find evidential data in the form of a Summative result(s) or Interactive test outcome for each certified criteria for Modernizing Medicine - EMA.



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

EMA EHR did not advance to newer standards outlined under the Standards Version Advancement Process (SVAP) during 2022.

Care Setting(s)

Care Setting	Justification
Dermatology	Dermatologists comprise a relatively large proportion of our EMA business.
Ophthalmology/Optometry	Ophthalmologists comprise a relatively large proportion of our EMA business.
Orthopedics	Orthopedists comprise a relatively large proportion of our EMA business.
Other specialties	Otolaryngology, Pain Management, Podiatry, Urology, and Gastroenterology each comprise a relatively smaller proportion of our EMA business.
Plastic Surgery (Plastics)	Plastic surgery providers frequently operate as a cash business and generally do not participate in incentive programs.



Metrics and Outcomes

Within this section is a list of the results collected from the EMA EHR Real World Testing measures as defined in their Real World Test plan. Outcomes are listed as Pass, Pass with Exception, or Fail determined by the success of obtaining testing results. This determination was based on a thorough review by the EMA team. A link is included within the **Outcomes** column in the table below to a subsequent **Outcomes Details** table. This second table matches each outcome with additional detailed information such as supporting resources and descriptions of the tests that were performed.

Key components include:

- Created a comprehensive Test Results Report which details customer environment, patient data utilized for tests, locations of testing
- Attempted Summative and/or Interactive Testing
- Collected audit logs and queries to support spreadsheets and as necessary, screen shots that demonstrate proof of Interactive Testing for each criteria with "0" values in Summative Testing. These files are referenced and remain on file with EMA.

The following metrics were measured by viewing and querying audit logs in the client's live production system for various different times period during 2022 as identified in Outcomes section for each measure. The resultant report was then saved to show the usage (or lack thereof) of the criterion. The table below summaries the results of both quantitative measurement and interactive testing.

Associated Criterion(a)	Measurement/Metric	Relied Upon Software (if applicable)	Outcomes	Challenges Encountered (if applicable)
170.315(b)(1) Transitions of care	Over a 90-day period: 1) Number of CCDAs created 2) Number of CCDAs sent via edge protocols 3) Number of CCDAs received via edge protocols	Updox	1) 220,137 2) 210,664 3) 114,372	Number of CCDA sent includes attempted (220,137) plus successfully sent (210,664)
170.315(b)(2) Clinical information reconciliation and incorporation	Over a 90-day period: 1) Number of CCDA received 2) Number of CCDA received and patient match 3) Number of CCDA received and a user reconciled	N/A	Pass 1) 114,372 2) 54,791 3) 18,111 (From July1st – Sept 29 - Q3)	



170.315(b)(3) Electronic prescribing	Over a 90-day period: 1) Number of prescriptions created 2) Number of prescriptions changed 3) Number of prescriptions canceled 4) Number of		Pass 1) 1,047,9521 2) 17,733 3) 152,148 4) 599,779 For Oct, Nov & Dec 2022	Data provided by Surescript
170.315(b)(6) Data export	Over a 90-day period: 1) Number of times a data export was performed for a patient 2) Number of times a data export was performed for multiple patients in a single transaction 3) Number of times a data export was performed for all patients in a single transaction	N/A	Pass 1) 3 2) 3 3) 35 (From July1st – Sept 29 - Q3)	(3) 36 attempted, 35 successfully exported.
170.315(c)(1) Clinical quality measures (CQMs)	Over a 90-day period: 1) Number of measures recorded during the period 2) Number of QRDA Category 1 files exported 3) Number of QRDA Category 1 files imported (if applicable) 4) Number of QRDA Category 3 aggregate report(s) created over the period		<u>Pass</u> 0	EMA supports only one eCQM. We provided detailed screenshots on how to run the report, download CAT I and CAT III files for the eCQM supported (CMS68 Documentation of Current Medications in the Medical Record)
170.315(e)(1) View, download, and transmit to 3rd party	Over a 90-day period: 1) Number of views of health information by a patient or authorized representative 2) Number of downloads of health information by a patient or authorized representative 3) Number of transmissions of health information by		Pass 1) 611,2821 2) 110,924 3) 2,625 4) 2,617 (From July1st – Sept 29 - Q3)	



	4) N t t a a	a patient or authorized representative using unencrypted email Number of ransmissions of nealth information by a patient or authorized representative using encrypted method			
170.315(g)(7) Application access — patient selection	2) N 2) N t s t r 3) N	Number of requests for a patient ID or oken Number of requests hat provided sufficient information o provide a valid response Number of follow-up requests made using the provided patient D or token	N/A	1) 371 (From 2022)	We have low usage and adoption for our Patient/Provider API access. We offer another solution and and additional set of FHIR APIs for Vendors.
170.315(g)(8) Application access — data category request	2) N f c 2) N f r	Number of requests for a patient's data made by an application via a data category request using a valid patient D or token Number of requests for a patient's data made by an application via a data category request using a valid patient D or token for a specific date range	N/A	1) 11 (From 2022)	We have low usage and adoption for our Patient/Provider API access. We offer another solution and an additional set of FHIR APIs for Vendors.
170.315(g)(9) Application access — all data request	2) N	Number of requests for a patient's Summary Record made by an application via an all data category request using a valid patient D or token Number of requests for a patient's Summary Record made by an application via an all data category request using a valid patient		0	Interactive (screenshots) provided, showing date range functionality



	ID or token for a specific date range			
170.315(h)(1) Direct Project	 Number of Direct Messages sent Number of Delivery Notifications received Number of Direct Messages received Number of Delivery Notifications sent 	Updox	Pass 1) 243,822 2) 161,603 3) 243,822 4) 161,603	

Outcome Details

The following sections contain additional descriptions and test results supporting documentation to provide more context for the testing outcomes defined in the **Metrics and Outcomes** table above.

170.315(b)(1) Transitions of care

Summary Description

Pass Method: Summative Testing

The purpose of this test was to show that CDA documents are able to be created and exported.

A query on historical audit logs for 90-day periods was performed for the 170.315(b)(1) criterion. The resulting totals show that this module was active throughout the period and therefore demonstrates a compliant result.

Justification

This criterion requires the ability of a certified Health IT module to create CCDAs according to specified standards and vocabulary code sets, as well as send and receive CCDAs via edge protocols. However, it is not possible to consistently and reliably demonstrate that all required standards and code sets were used because not all CCDAs created in a real-world setting contain all the necessary data elements. Furthermore, it is not feasible to obtain copies of CCDA documents from "outside" developers or providers who have no incentive to participate in this exercise. Therefore, we intend to demonstrate the required certified capabilities by demonstrating how often CCDAs are created and exchanged with other systems to demonstrate the certified capability is available and effective, regardless of the frequency it is used. Our expectation is there will be moderate utilization by providers with a high success rate.

Results Supporting Documents

Please Contact EMA for any Results spreadsheets if needed.

170.315(b)(2) Clinical Information Reconciliation and Incorporation

Summary Description

Pass Method: Summative Testing





The purpose of this test was to show that CDA documents are able to be imported, matched to a patient, reconciled and new CDA documents created and exported.

A query on historical audit logs for 90-day periods was performed for the 170.315(b)(2) criterion. The resulting totals show that this module was active throughout the period and therefore demonstrates a compliant result.

Justification

This criterion requires the ability of a certified Health IT module to take a CCDA received via an outside system and match it to the correct patient; reconcile the medication, allergy, and problem lists; and then incorporate the lists into the patient record. The expectation is each of these steps is done electronically within the certified Health IT module. While this certified capability is available to our users, most providers in the real world typically prefer to perform these steps manually and elect to save any outside received CCDAs as attachments to the patient record. Therefore, we intend to record the frequency that providers are electronically reconciling and incorporating CCDAs that were received from outside providers to demonstrate the certified capability is available and effective, regardless of the frequency it is used. Our expectation is there will be low utilization by providers with a high success rate

Results Supporting Documents

Please Contact EMA for any Results spreadsheets if needed.

170.315(b)(3) Electronic Prescribing

Summary Description

Pass Method: Summative Testing

The purpose of this test was to show that an active connection from EHR customer sites to an ePrescribing solution was deployed.

A query on historical audit logs for 90-day periods was performed for the 170.315(b)(3) criterion. The resulting totals show that this module was active throughout the period and therefore demonstrates a compliant result.

Justification

This criterion requires the ability of a certified Health IT module to perform prescription-related electronic transactions (eRx) using required standards. However, it is not possible to demonstrate the correct standards were used because it is not feasible to obtain copies of eRx documents from "outside" companies or pharmacies who have no incentive to participate. Therefore, we intend to demonstrate the required certified capabilities are effective by demonstrating how often eRx transactions are performed by examining reports from our eRx partner. This will demonstrate that not only are the eRx transactions sent from the certified Health IT module, but that the transactions are successfully received by the eRx clearinghouse. Our expectation is there will be high utilization by providers with a high success rate.

Results Supporting Documents

Please Contact EMA for any Results spreadsheets if needed.

170.315(b)(6) Data Export

Summary Description

Pass Method: Summative Testing

The purpose of this test was to show that our customer can export patient data from our EHR without any assistance from EMA.

A query on historical audit logs for 90-day periods was performed for the 170.315(b)(6) criterion. The resulting



totals show that this module was active throughout the period and therefore demonstrates a compliant result.

Justification

This criterion requires the ability of a certified Health IT module to export a summary of a patient's record in CCDA format according to specified standards and vocabulary code sets. However, it is not possible to consistently and reliably demonstrate that all required standards and code sets were used because not all CCDAs created in a real-world setting contain all the necessary data elements. Therefore, we intend to demonstrate the certified capability is available and effective, regardless of the frequency it is used. Our expectation is there will be very low utilization by providers with a high success rate.

Results Supporting Documents

Please Contact EMA for any Results spreadsheets if needed.

170.315(c)(1-3) Clinical Quality Measures (CQMs)

Summary Description

Pass Method: Interactive Testing

The purpose of this test was to show that the EHR meets the QRDA reporting requirement for the designated care settings.

A query on historical audit logs for 90-day periods was performed for the 170.315(c)(1-3) criterion. Due to low or zero adoption of this criteria, health IT developer demonstrated the module function in their system as an interactive test demonstrating a compliant result.

Justification

These criteria will be tested together. C1 requires a certified Health IT module to record required data, calculate CQMs from the recorded data, and export the data in QRDA Category 1 format. C2 requires a certified Health IT module must be able to import data from a QRDA Category 1 formatted file and calculate the CQMs based on that data. C3 requires a certified Health IT module must be able to create a QRDA Category 1 formatted file and a QRDA Category 3 aggregate report to be used for transmitting CQM data to CMS. We intend to record the frequency that CQM files are imported and/or exported by providers to demonstrate the certified capability is available and effective, regardless of the frequency it is used. Our expectation is there will be moderate utilization by providers with a high success rate.

Results Supporting Documents

Please Contact EMA for any Results spreadsheets and screenshots if needed.

170.315(e)(1) View, Download, and Transmit to 3rd Party

Summary Description

Pass Method: Summative Testing

The purpose of this test was to show that the EHR provides patients access to a patient portal with the ability to view, download, and send their health care records for the designated care settings.

A query on historical audit logs for 90-day periods was performed for the 170.315(e)(1) criterion. The resulting totals show that this module was active throughout the period and therefore demonstrates a compliant result.



Justification

This criterion requires the ability of a certified Health IT module to provide patients access to a patient portal with the ability to view, download, and send their health care records to other providers via encrypted or unencrypted transmission methods in CCDA format. We intend to record the frequency that patients are viewing, downloading, and transmitting their records from the portal using the certified capabilities to demonstrate the certified capability is available and effective, regardless of the frequency it is used. Our expectation is there will be moderate utilization by patients for view and lower utilization for download and transmit with a high success rate for all certified capabilities.

Results Supporting Documents

Please Contact EMA for any Results spreadsheets if needed.

Results Supporting Documents

Please Contact EMA for any Results screenshots if needed.

170.315(g)(7) Application Access — Patient Selection

Summary Description

Pass Method: Summative and Interactive Testing

The purpose of this test was to show that the EHR is able to fulfill an API request that enables external applications to request a unique patient identifier from the certified Health IT module that can be used to request additional patient data.

A query on historical audit logs for 90-day periods was performed for the 170.315(g)(7) criterion. Due to low or zero adoption of this criteria, health IT developer demonstrated the module function in their system as an interactive test demonstrating a compliant result.

Justification

This criterion requires the certified Health IT module to provide an API and supporting documentation that enable external applications to request a unique patient identifier from the certified Health IT module that can be used to request additional patient data. We intend to record the frequency that patient ID requests are received by providers via API to demonstrate the certified capability is available and effective, regardless of the frequency it is used. Our expectation is there will be zero adoption of this certified capability by our users, so we have added interactive testing methodology for these capabilities to the test plan below to demonstrate the feature is available and functions as expected should any users elect to begin using this feature.

Results Supporting Documents

Please Contact EMA for any Results screenshots if needed.

170.315(g)(8) Application Access — Data Category Request

Summary Description

Pass Method: Summative and Interactive Testing

The purpose of this test was to show that the EHR is able to fulfill an API request that enables external applications to request patient data categories from the certified Health IT module.

A query on historical audit logs for 90-day periods was performed for the 170.315(g)(8) criterion. Due to low or zero adoption of this criteria, health IT developer demonstrated the module function in their system as an interactive test demonstrating a compliant result.

Justification



This criterion requires the certified Health IT module to provide an API and supporting documentation that enable external applications to request patient data by category from the certified Health IT module. We intend to record the frequency that patient data requests by category are received by providers and fulfilled via API to demonstrate the certified capability is available and effective, regardless of the frequency it is used. Our expectation is there will be zero adoption of this certified capability by our users, so we have added interactive testing methodology for these capabilities to the test plan below to demonstrate the feature is available and functions as expected should any users elect to begin using this feature.

Results Supporting Documents

Please Contact EMA for any Results spreadsheets and screenshots if needed.

170.315(g)(9) Application Access — All Data Request

Summary Description

Pass Method: Summative & Interactive Testing

The purpose of this test was to show that the EHR is able to fulfill an API request that enables external applications to request all categories of patient data defined in the CCDS from the certified Health IT module.

A query on historical audit logs for 90-day periods was performed for the 170.315(g)(9) criterion. Due to low or zero adoption of this criteria, health IT developer demonstrated the module function in their system as an interactive test demonstrating a compliant result.

Justification

This criterion requires the certified Health IT module to provide an API and supporting documentation that enable external applications to request all categories of patient data defined in the CCDS from the certified Health IT module. We intend to record the frequency that patient data requests for all categories are received by providers and fulfilled via API to demonstrate the certified capability is available and effective, regardless of the frequency it is used. Our expectation is there will be zero adoption of this certified capability by our users, so we have added interactive testing methodology for these capabilities to the test plan below to demonstrate the feature is available and functions as expected should any users elect to begin using this feature.

Results Supporting Documents

Please Contact EMA for any screenshots if needed.

170.315(h)(1) Direct Project

Summary Description

Pass Method: Summative Testing

The purpose of this test was to show that the EHR is able to process Direct messages bi-directionally as well as track MDNs.

A query on historical audit logs for 90-day periods was performed for the 170.315(h)(1) criterion. The resulting totals show that this module was active throughout the period and therefore demonstrates a compliant result.

Justification

This criterion requires the ability of a certified Health IT module to record the frequency that direct messages are sent and received by providers, along with how often MDNs are sent and received. Since not all systems respond with MDNs, we cannot reliably use that metric to define success. Furthermore, it is not feasible to obtain copies of



Direct Messages from "outside" developers or providers who have no incentive to participate in this exercise. Therefore, we intend to demonstrate the required certified capabilities by demonstrating how often Direct Messages are exchanged with other systems to demonstrate the certified capability is available and effective, regardless of the frequency it is used. Our expectation is there will be moderate utilization by providers with a high success rate.

Results Supporting Documents

Please Contact EMA for any Results spreadsheets if needed.

KEY MILESTONES

Includes a list of key milestones that were met during the Real World Testing process. Includes details on how and when EMA implemented measures and collected data.

Key Milestone	Care Setting	Date/Timeframe
Scheduling and logistics	See table above	January, 2022
Data collection	See table above	Calendar Year 2022
Review and Collect Data	See table above	December, 2022 – January 2023
Writing Report	See table above	January, 2023
EMA executed summative testing to show that the criterion are functional. The following metrics were pulled from transaction logs as detailed in the outcomes section above: • 170.315 (b)(1) Transitions of care • 170.315 (b)(2) Clinical Information Reconciliation and Incorporation • 170.315 (b)(3) Electronic Prescribing • 170.315 (b)(6) Data Export • 170.315 (e)(1) View, Download, and Transmit to 3rd Party • 170.315(g)(7) Application access—patient selection • 170.315(g)(8) Application access—data category request • 170.315 (h)(1) Direct Project	See table above	
EMA executed interactive testing to show that the criteria are functional. The following metrics were tested interactively as detailed in the outcomes section above: • 170.315 (c)(1-3) Clinical Quality Measures (CQMs) • 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	See table above	



ATTESTATION

This Real World Testing Results Report 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: 1 Feb 2023