REAL WORLD TESTING PLAN 2024

GENERAL INFORMATION

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

Developer Name: **Medi-EHR, LLC**

Product Name(s): **Medi-EHR**

Version Number(s): **2.1**

Certified Health IT Product List Product Number: **15.02.05.2979.MEDI.01.01.1.220215**

Developer Real World Testing Plan Page URL: **https://medi-ehr.com/rwt**

JUSTIFICATION FOR REAL WORLD TESTING APPROACH

As per ONC, the objective of real world testing is to verify the extent to which certified health IT deployed in operational production settings is demonstrating continued compliance to certification criteria and functioning with the intended use cases as part of the overall maintenance of a health IT's certification.

Medi-EHR's goal with RWT is to put the objective defined by ONC into practice. We will plan on achieving this goal by leveraging our system logs to monitor real world use of our certified technology. This would ensure that our users perform their day to day actions in an unbiased setting, and results of the testing reflect actual utilization of different certified criteria.

CARE SETTINGS

Medi-EHR is marketed and sold in the following care settings:

- Physician's Office
- Behavioral Health
- Ambulatory Surgical Centers

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

Standard (and Version)	*USCDI v1*
Updated certification criteria and associated product	*b1, b2, e1, g9*
CHPL Product Number	*15.02.05.2979.MEDI.01.01.1.220215*
Method used for standard update	*Cures Update*
Date of ONC ACB notification	*12/23/2022*
Standard Which certification criteria were updated to USCDI and/or to which version of USCDI was the certification criteria updated	*b1, b2, e1, g9 - USCDI v1*
Conformance Measures	*Sharing/Transmitting Use Case 1 for b1, Receive & Incorporate Use Case 2 for b2, Sharing/Transmitting Use Case 7 for e1, and Access Use Case 9 for g9*

Table 1: USCDI Standards

MEASURES USED IN OVERALL APPROACH

Measure	*Description*
Sharing/Transmitting	*This metric will measure our system's ability to successfully transmit messages/documents for patient care coordination.*
Receive & Incorporate	*This metric will measure our system's ability to receive and consume the data shared by other care team members of the patients.*
Clinical Quality	*This measure will catalog clinical quality measures to record, import, and export and calculate in a report to electronically create a data file for transmission of clinical quality measurement data.*
Access	*This metric will demonstrate our system's ability to make the stored PHI available on demand.*
Utilization	*This metric will measure the utilization of different types of interoperability messages that our system supports.*

Table 2: Measure descriptions

ASSOCIATED CERTIFICATION CRITERIA

Measurement/Metric	*Associated Certification Criteria*
Sharing/Transmitting	170.315 (b)(1): Transitions of Care 170.315 (b)(3): Electronic Prescribing (Cures Update) 170.315 (b)(10): Electronic Health Information Export (Cures Update) 170.315 (e)(1): View, Download, and Transmit to 3rd Party 170.315 (f)(1): Transmission to Immunization Registries 170.315 (f)(2): Transmission to Public Health Agencies - Syndromic Surveillance 170.315 (h)(1): Direct Project
Receive & Incorporate	170.315 (b)(2): Clinical Information Reconciliation and Incorporation
Clinical Quality	170.315 (c)(1): Clinical Quality Measures - Record and Export 170.315 (c)(2): Clinical Quality Measures - Import and Calculate 170.315 (c)(3): Clinical Quality Measures – Report
Access	170.315 (g)(7): Application Access - Patient Selection 170.315 (g)(9): Application Access - All Data Request 170.315 (g)(10): Standardized API for Patient and Population Services
Utilization	170.315 (b)(7): Data Segmentation for Privacy – Send 170.315 (b)(8): Data Segmentation for Privacy – Receive

Table 3: Measure to Certified Criteria Mapping

USE CASE 1

During the course of ambulatory care, providers share patient records (CCDAs) with each other where it is appropriate. Providers transitioning to another system may also request records in this format.

Certification Criteria:

- 170.315(b)(1) Transitions of care
- 170.315 (h)(1): Direct Project

Measures:

- Sharing/Transmitting

Justification:

- This metric provides a numeric indication about how often this interop function is used and the request is satisfied. An increase in this measure indicates that the EHR can create a C-CDA patient record, including all recommended clinical data elements, and by transmitting the C-CDA patient record, the EHR demonstrates successful interoperability with external systems. This measure also demonstrates support for Direct Edge protocol when the CCDA documents are transmitted by connecting to a HISP.

Relied Upon Software: EMR Direct (*applies to 170.315 (h)(1): Direct Project*)

Testing Methodology:

- System log audit of CCDAs created in accordance with the CDA standards and shared via Direct Protocol will be de-identified and used to evaluate real world usage of this feature.

Expected Outcomes:

- This measure tracks the number of C-CDA files submitted/received electronically via HISP, whether successful or unsuccessful, and tracks error rates. The measurement will provide numerical results during the test period and it is expected that more than 90% of CCDA documents will be successfully shared via direct messaging.

Care Settings:

- Physician's Office, Behavioral Health and Ambulatory Surgical Centers

USE CASE 2

A provider may receive CCDA information from another EHR for a single or multiple patients or a provider transitioning to our system may receive CCDA information from their previous EHR

Certification Criteria:

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

Measures:

- Receive & Incorporate

Justification:

- This metric provides a numeric value that indicates how often this interop function is used and whether it meets the requirement. An increase in this measure indicates that the EHR can receive a C-CDA summary patient record, and by correctly incorporating the problem, medications, and allergies data from the C-CDA document, the EHR demonstrates its interoperability by consuming clinical data from external systems.

Relied Upon Software: Not Applicable.

Testing Methodology:

- System log audits will be de-identified and then analyzed to evaluate system's success and failure ratio to see if:
  1. The document was matched with the correct patient
  2. The user was able to reconcile data from the document and merge that data into the patient's Medication List, Medication Allergy List, and Problem List.

Expected Outcomes:

- CCDAs received are successfully processed and the information can be:
  - Viewed by the intended provider in human readable format (with a comparison to the current PHI of a particular patient)
  - CCDA data can be processed into the patient's PHI

- Successful completion of this step implies that users have a general understanding of the EHR's reconciliation function and its user experience, while failure to complete this workflow indicates a lack of understanding or possibly a lack of usage of this functionality. Error rates will be tracked and trended over time for reconciliation.

Care Settings:

- Physician's Office, Behavioral Health and Ambulatory Surgical Centers

USE CASE 3

Routine patient management will involve sending and managing prescription requests with various message types.

Certification Criteria:

- 170.315 (b)(3): Electronic Prescribing (Cures Update)

Measures:

- Sharing/Transmitting

Justification:

- This metric is intended to provide a numeric value that indicates how often this interoperability function is used and whether it meets the requirement. An increment in the value of this measure will indicate that Medi-EHR can create and transmit e-prescription messages to Surescripts according to NCPDP script standard.

Relied Upon Software: Not Applicable.

Testing Methodology:

- Logs generated by physician's prescription activities during the real world Testing will be used to analyze the structural validity of the messages created for interoperability between Medi-EHR and the Surescripts, along with the reliability of established transportation mechanisms, and utilization rates of implemented prescription transactions.

Expected Outcomes:

- The measurement will provide numerical results for the tested interval. We will use audit reports/logs to determine the number of successful/unsuccessful prescription transactions, by tracking and trending them over time. It is expected that a significant number of prescription messages are successfully transmitted and processed by the system.

Care Settings:

Physician's Office, Behavioral Health and Ambulatory Surgical Centers

USE CASE 4

The incoming or outgoing CCDAs (similar to Use Case 2) may be received or sent with (directed to an intended user) or without security tags

Certification Criteria:

- 170.315 (b)(7): Data Segmentation for Privacy – Send
- 170.315 (b)(8): Data Segmentation for Privacy – Receive

Measures:

- Utilization

Justification:

- This measure will track the utilization rates of above listed certification criteria. It will demonstrate the user's ability to tag C-CDA files generated from the system for privacy, and for incoming documents it will reflect the system's ability of displaying data in accordance with the privacy tags contained in the received file.

Relied Upon Software: Not Applicable.

Testing Methodology:

- System log audit of data created and sent/received with the use of security tags specifically within a CCDA per Medi-EHR system logs
- Demonstrate that incoming/outgoing messages for the intended recipient are only viewable by that recipient no not by other users per Medi-EHR system logs

Expected Outcomes:

- Data segmentation is successfully achieved without the security tags
- Data segmentation is also successfully achieved for messages with security tags and are securely viewed by the intended user (for data received) and successfully exported (for data sent) per the system logs

Care Settings:

- Physician's Office, Behavioral Health and Ambulatory Surgical Centers

USE CASE 5

Providers or authorized staff may export patients' electronic health information in custom format upon their requests.

Certification Criteria:

- 170.315 (b)(10): Electronic Health Information Export (Cures Update)

Measures:

- Sharing/Transmitting

Justification:

- This measure will track how often users of Medi-EHR take advantage of the functionality to export patient's electronic health information to other systems and healthcare professionals to improve care coordination.

Relied Upon Software: Not Applicable.

Testing Methodology:

- System log audit of exported PHI for one or more patients will demonstrate the frequency of different health information exported from the system, along with the format in which it was exported.

Expected Outcomes:

- It is expected that logs will reflect that export requests were often completed successfully, and in case of errors, they are tracked and trended over time to reflect the type of errors encountered.

Care Settings:

- Physician's Office, Behavioral Health and Ambulatory Surgical Centers

USE CASE 6

Providers or authenticated users can transmit or receive clinical quality measure data in the standardized QRDA I and III formats.

Certification Criteria:

- 170.315 (c)(1): Clinical Quality Measures - Record and Export
- 170.315 (c)(2): Clinical Quality Measures - Import and Calculate
- 170.315 (c)(3): Clinical Quality Measures - Report

Measures:

- Clinical Quality

Justification:

- For real world testing for this measure, we will use the six eCQMs Medi-EHR certified during 2015 edition. This measure will provide a frequency and list of electronic clinical quality measures (eCQMs) which are calculated by users, and how often their QRDA files are generated for submission to CMS. Because CQM criteria, 315(c)(1)-(c)(3), all work collectively together in the eCQM functionality of the EHR Module, this measure is used for all three.

Relied Upon Software: Not Applicable.

Testing Methodology:

- This measure will be triggered to track both, clinicians' click actions and system's responses when recording, importing, calculating and exporting CQM data. System logs will be de-identified and analyzed to demonstrate QRDA I & III generation.

Expected Outcomes:

- A higher success percentage of measure will indicate compliance to the underlying ONC criteria. It will show that the EHR can do calculations on the eCQM and that they are accepted by CMS. A lower measure percentage will indicate that the system failed, for which errors will be tracked and trended over time. It is expected that clinical quality measures data will be exported and imported by the system successfully, frequently.

Care Settings:

- Physician's Office, Behavioral Health and Ambulatory Surgical Centers

USE CASE 7

Patients or authorized representatives are able to view, download, and transmit their health care data in CCDs by either email or direct message depending on their choice.

Certification Criteria:

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

Measures:

- Sharing/Transmitting

Justification:

- By analyzing system logs audit on the Patient Portal, this measure aims to verify that patients are able to access their health information according to the (e)(1) View, Download, and Transmit to 3rd Party criterion. Looking at the database level and logs will enable Medi-EHR to identify any error events when patients' attempted to view, download, or transmit their health information.

Relied Upon Software: Not Applicable.

Testing Methodology:

- System logs will be de-identified and analyzed to demonstrate that patients have the ability to view, download and transmit their electronic health information whenever they want.

Expected Outcomes:

- System logs will be analyzed for the testing period to determine usage frequency. Log files obtained during the Real World test are going to be anonymized and used for analysis in different areas to validate the proper operations of access and export. Error rates will be tracked and their trends will be observed over time. It is expected that successful access to clinical data, and its sharing via user's preferred medium will be observed for significant number attempts.

Care Settings:

- Physician's Office, Behavioral Health and Ambulatory Surgical Centers

USE CASE 8

Provider may report to an immunization registry or a public health agency per state requirements.

Certification Criteria:

- 170.315 (f)(1): Transmission to Immunization Registries
- 170.315 (f)(2): Transmission to Public Health Agencies - Syndromic Surveillance

Measures:

- Sharing/Transmitting

Justification:

- The measure will track the system's ability to transmit the health information to immunization registries, syndromic surveillance reporting and public health agency reporting in required formats. Based on the system generated logs; system will evaluate the success and error rates for the transmission.

Relied Upon Software: Not Applicable.

Testing Methodology:

- System logs showing successful generation of the standardized messages for transmission to Immunization Registries and Public Health Agencies.

Expected Outcomes:

- System logs will be reviewed for testing period to determine the frequency of use. Log files obtained during Real World Testing will keep track of the instances when data will be submitted to registries and acknowledgement responses from the registries are received for indicating successful or failed transmissions. In case of failures, error rates will be logged and trended over time.

Care Settings:

- Physician's Office, Behavioral Health and Ambulatory Surgical Centers

USE CASE 9

Authorized vendors or software partners should be able to consume these API's per the certification criteria listed

Certification Criteria:

- 170.315 (g)(7): Application Access - Patient Selection
- 170.315 (g)(9): Application Access - All Data Request
- 170.315 (g)(10): Standardized API for Patient and Population Services

Measures:

- Access

Justification:

- Medi-EHR provides access to patient data through the custom APIs, this measure will provide a metric on the use of these APIs to access patient data. This will be done by analyzing system log files.

Relied Upon Software: EMR Direct (*applies to 170.315 (g)(10): Standardized API for Patient and Population Services*)

Testing Methodology:

- Patient Search Requests Served
    - Denominator: Total requests of certified API(s)
    - Numerator: # of successful responses
- Requests Served for all data requested
    - Denominator: Total requests of certified API(s) for all data requested
    - Numerator: # of successful responses
- Requests Served for Single and Population Health in Standardized Format(FHIR)
    - Denominator: Total read requests for FHIR resources
    - Numerator: # of successful responses

Expected Outcomes:

- Successful response rate of APIs is over 80%, and error rates will be tracked and trended over time.

Care Settings:

- Physician’s Office, Behavioral Health and Ambulatory Surgical Centers

SCHEDULE OF KEY MILESTONES

Initial development of the Real World Testing plan	Oct 23
Finalization of the Real World Testing plan, and submission to ONC-ACB	Nov 23
Collection of information as laid out by the plan for the period	Jan 24 – Dec 24
Completion of testing phase	Dec 24
RWT Results Report Submission	Jan 15, 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.

Authorized Representative Name: Matthew D'Alessandro

Authorized Representative Email: certification@medi-ehr.com

Authorized Representative Phone: 888.633.1367

Authorized Representative Signature: 

Date: 10.17.2023