

REAL WORLD TESTING PLAN

GENERAL INFORMATION

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

Developer Name: eMDs

Product Name(s): Plus EHR

Version Number(s): eMDs Plus v4.0

Certified Health IT Product List (CHPL) ID(s): 15.04.04.2881.eMDs.04.00.1.181231

Developer Real World Testing Page URL: emds.com/certifications

JUSTIFICATION FOR REAL WORLD TESTING APPROACH

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***", this test plan focuses on capturing and documenting the number of instances that certified criteria are successfully utilized in the real world. In instances where no evidence exists due to zero adoption of a certified capability or the inability to capture evidence of successful use for other reasons, we will demonstrate the required certification criteria in a semi-controlled setting as close to a "real world" implementation as possible.

We are using a three-fold approach to demonstrate successful real-world implementations

- Adoption Rate
- Summative Assessment
- Interactive Testing

Adoption rate will be used to determine the number of customers that are using workflows that exercise certification criteria. Evidence of a density of usage across our customer base indicates (but doesn't by itself prove) the usefulness and practical value of our certified products implementation of a particular criterion.

Summative assessments will be used to measure the real-world usage of certified criteria. As actions are performed that meet each criteria, the Certified Health IT system will tally and aggregate this information. Data will be collected for a period of 90 days. This data will then be collated from across our customer base, and a summary of results will be obtained by running reports and examining audit logs from within the certified health IT module. Where possible, we will identify successes and failures of actions that meet the certified criteria. Both high volume and high success rates should be an indicator of a successful implementation of the involved certification criteria.

Interactive testing will be used to demonstrate conformance to certification standards that have low or non-existent adoption rates. Interactive tests will require a live test and will attempt to demonstrate compliance with updated standards and code sets in relation to the certified criteria.

STANDARDS UPDATES

eMDs has not updated the Plus EHR to any new standards as part of SVAP or the Cures Update criteria as of this date nor plan to prior to the execution of our real-world testing.

CARE SETTINGS

Plus EHR is marketed primarily to ambulatory care facilities. eMDs does not market differently for different specialties. Some criteria are more likely to be used in primary care facilities, specifically 170.315(f)(1).

| Care Setting |
|---|
| Primary Care (e.g., Family Medicine, Pediatrics, OB/GYN, etc.) |
| General Specialties (e.g., Internal Medicine, Neurology, Cardiology, etc.) |
| Orthopedic Specialties (e.g., Physical Therapy, Orthopedics, Podiatry, etc.) |
| Surgical Specialties (e.g., General Surgery, Plastic Surgery, Hand Surgery, etc.) |
| Behavioral Health |

MEASURES USED IN OVERALL APPROACH

ADOPTION RATES

The following metrics are applicable to all criteria and all care settings. These metrics will not be used to directly demonstrate interoperability or conformance to certification criteria. Instead, they will be used to help determine the participants that will be in scope for this evaluation. The below information can also be used to frame metrics obtained via summative assessment.

| Metric | Description |
|---|---|
| Number of licensed instances/users of EHR | Identify the total number of licensed instances/users of the certified Health IT module, regardless of care setting, participation in incentive programs, or use of certified capabilities. |

The following metrics are applicable to all criteria that are licensed separately from the base license and all care settings.

| Metric | Description |
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| Certified Capabilities that are licensed separately | Immunization Registries |
| Number of installs/users that have used the certified capability in the preceding 365 days | Where applicable, identify the number of active instances/users of a given certified capability. |

SUMMATIVE ASSESSMENT METRICS

The following metrics will be measured by viewing audit logs and reporting systems available to track the behavior of the certified Health IT module during a specified time frame. All metrics are designed to reflect the core elements of the criteria, demonstrate interoperability, and demonstrate the success rate of the certified capability being used.

The continued measurable use of certified capabilities will prove implicit evidence of successful implementation of the certification criteria involved. In cases where the criteria demonstrate interoperability with external systems, this type of data is especially useful, as it shows the active usage by our customer base.

In cases where it is not possible to determine “success” via an explicit confirmation by a receiving system, success will be defined as a transmission made where no error was received from the destination system or its intermediaries. Additionally, we will review internal customer and vendor issue tracking systems for reports of failures or unsatisfactory performance in the field.

All testing is scheduled to be conducted against the 2015 Edition version of the criteria.

| Criterion | Metric | Care Setting | Justification and Expected Outcome |
|--------------------------------------|---|--------------|---|
| 170.315(b)(1) Transitions of Care | Over a 90-day period: <ol style="list-style-type: none"> 1) Number of CCDAs created 2) Number of Direct Messages sent with attachments 3) Number of Direct Messages received with attachments | All | 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 them. It is not possible to consistently and reliably |

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| | | | <p>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.</p> <p>Per 170.315(b)(1) if it is not feasible to determine what document types were attached to a Direct Message, the criteria being reported can be adapted to reflect the level of specificity you are able to obtain.</p> <p>Therefore, we intend to demonstrate the required certified capabilities by tracking how often CCDAs are created and the frequency with which direct messages are exchanged with external systems where an attachment has been included.</p> <p>Our expectation is that there will be moderate utilization by providers with a high success rate.</p> |
| <p>170.315(b)(2) Clinical Information Reconciliation and Incorporation</p> | <p>Over a 90-day period:</p> <ol style="list-style-type: none"> 1) Number of times a user reconciled medication list data from a received CCDA. 2) Number of times a user reconciled allergies and intolerance list data from a received CCDA. 3) Number of times a user reconciled | <p>All</p> | <p>This criterion requires the ability of a certified Health IT module to take a CCDA received via an outside system, match it to the correct patient and reconcile the medication, allergy, and/or problem list, and then incorporate the data into the patient record. The expectation is that each of these steps is done electronically within the certified Health IT module.</p> |

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| | <p>problem list data from a received CCDA.</p> | | <p>While this certified capability is available to our users, most providers in the real world typically perform these steps manually and elect to save any CCDAs received from outside sources as documents attached to the patient's medical record.</p> <p>Therefore, we intend to record the frequency at which providers are electronically reconciling and incorporating CCDA data that were received from outside providers to demonstrate the certified criteria is available.</p> <p>Our expectation is that there will be low utilization by providers with a high success rate.</p> |
| <p>170.315(b)(3) Electronic Prescribing</p> | <p>Over a 90-day period:</p> <ol style="list-style-type: none"> 1) Number of prescriptions created 2) Number of prescriptions changed. 3) Number of prescriptions cancelled. 4) Number of prescriptions renewed. | <p>All</p> | <p>This criterion requires the ability of a certified Health IT module to perform prescription related electronic transactions (eRx) that meet required standards.</p> <p>We intend to demonstrate the required certified capabilities are effective by demonstrating how often the various types</p> |

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| | | | <p>of eRx transaction are performed by examining reports generated by our eRx partner, Surescripts. This will demonstrate that providers are actively electronically prescribing and that those eRx transactions are received by the eRx clearinghouse.</p> <p>Our expectation is there will be high utilization by providers with a high success rate for created and cancelled prescriptions. For prescription changes and renewals, we expect moderate utilization.</p> <p>This criterion uses the Relied Upon Software: First Databank. Because this test measures the end user's experience with the certified functionality, it serves as a sufficient test for both Plus and First Databank.</p> |
| <p>170.316(b)(6) Data Export</p> | <p>Over a 90-day period:</p> <ol style="list-style-type: none"> 1) Number of times a data export was performed for a single patient. 2) Number of times a data export was performed for multiple patients | <p>All</p> | <p>This criterion requires the ability of a certified Health IT module to export a summary of a patient's record in CCD format according to specified standards and vocabulary code sets.</p> <p>We intend to demonstrate the certified capability is</p> |

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| | | | 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. |
| 170.315(f)(1) Transmission to Immunization Registries | Over a 90-day period: 1) Number of electronic submissions were attempted 2) Number of electronic submissions were rejected | Primary Care | This criterion requires the ability of a certified Health IT module to transmit immunization data to a registry. Our expectation is that there will be low utilization with a moderate success rate. |

INTERACTIVE TESTING

The following test plans will be executed to demonstrate Real World certified capabilities for criteria where metrics are not available because there is no adoption to date.

eMDs will leverage interactive testing for the following criteria:

- § 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

High Level Interactive Test Plan

- **Test Environment:** All interactive testing will be performed on a mirrored production environment.
 - eMDs will use Teams to record the interactive test session.
 - The plan for interactively testing the criteria in the real world, which is described below, will be to enter information for 3 care setting categories to demonstrate how the certified functionality would work in the Real World in those settings as a representative sample of all the settings in which eMDs software is deployed.
- **Test Data:** Interactive testing will be performed using test patient data specific to the settings being tested in the mirrored production environment to be as representative as possible of Real-World patients. This precaution will be taken to reduce the risk of exposure to PHI.

| Criterion | Interactive Test Plan | Care Setting | Justification and Expected Outcome |
|---------------|-----------------------|--------------|------------------------------------|
| 170.315(g)(7) | | | Justification: |

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| Application Access – Patient Selection | eMDs will create three test patients that can be accessed via the API to represent 3 different care settings: Primary Care, Specialty, and Surgical. | Primary Care, Specialty, Surgical | As of the writing of this plan, the Plus EHR has not had any implementations against our API technology by our customers or third-party developers. |
| 170.315(g)(8) Application Access – Data Category Request | eMDs will then use PostMan to make API calls to perform the following functions to show that they are available and ready to be used in the Real World: | | Expected Outcomes: |
| 170.315(g)(9) Application Access – All Data Request | <ol style="list-style-type: none"> 1. Request Authorization – returns a url for patient to provide credentials. Patient will provide portal credentials and set scope of data to be included. A token will be returned so that the request for data can be fulfilled. 2. Use that token to query for a CCDA document that meets the scope defined by the authorizing patient. | | <ul style="list-style-type: none"> • When an Authorization request is made, a URL is generated that allows the patient to specify their portal credentials and set scope for the subsequent transaction. • When a CCDA is requested, it will be generated and returned to the system. The contents will reflect the scope that the patient indicated. <p>Note: Date Range filtering is available, but only applies to specific areas of the patient record. Details about which data elements will pull regardless of date range filtering can be found at: https://api.emds.com/documentation/intro</p> <p>This criterion uses the Relied Upon Software: Updox Patient Portal. Because this test measures the end user’s experience with the certified functionality, it serves as a sufficient test for both Plus and Updox Patient Portal.</p> |

SCHEDULE OF KEY MILESTONES

Real World test planning will commence in the first quarter of 2023. Each phase is expected to take 90-days to complete, with report writing to occur at the end of 2023/early 2024.

| Key Milestone | Date/Timeframe |
|--------------------------|------------------------------------|
| Scheduling and logistics | 90 days |
| Data Collection | 90 days (tentative start in April) |

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| Review and Collate Data | 90 days (tentative start in August) |
| Writing Report | 90 days |

ATTESTATION

This Real World Testing plan is complete with all required elements, including measures that address all certified 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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