2022 Real World Testing Plan

Background and Introduction

This is the real-world test plan for year 2022 for MDLand iClinic (certified EHR product). As ONC has stated, "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." We worked toward this objective in designing our test plan and its subsequent real world testing measurements and metrics.

The test plan builds toward the final testing measurements and metrics we will use to evaluate our product interoperability within production settings. Within each use case, we document associated ONC criteria, measurement description, justification for measurement, expected outcomes from the testing, care settings applied for the respective measure, and if applicable the number of clients to use our real-world testing approach.

We have included our timeline and milestones for completing the real-world testing in 2022, and information about compliance with the Standards Version Advancement Process updates.

Developer 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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General Information

MDLand RWT Document Version: RWT202101
Developer Name: MDLand International
Product Name(s): iClinic
Version Numbers(s): 12.3
Certified Health IT Criteria:
715.315(b)(1), (2), (3), (6); (c)(1) - (c)(3); (e)(1); (f)(1), (g)(7)-(9); (h)(1)
Product List (CHPL) ID and Link: https://chpl.healthit.gov/#/listing/9814
Developer Real-World Testing Page URL: https://www.mdland.com/iClinicEHR/RWT

Timeline and Milestones for Real-World Testing 2022

Quarter 1, 2022: Communicate with client clinics to determine participants in 2022 real-world testing. The goal is to have a sufficient number of clients committed for real world testing by the end of the first quarter.

Quarter 2 & 3, 2022: During the 2nd and 3rd quarter of 2022, the real-world testing with Participating clinics and providers will be scheduled and performed. Testing will be done either online or on site. Results will be documented in the test results section and then used to build the test report. If any non-compliance is observed, we will notify the ONC-ACB of the findings and make the necessary changes required.

Quarter 4, 2022: During the last quarter of the year, the CY 2023 real-world test plan will be completed according to ONC and ONC-ACB requirements and expectations. Test plan will be prepared for submission.

February 2023: Submit 2022 test results to to our ONC-ACB.

Standards Version Advancement Process (SVAP) Updates

For calendar year 2022, we are not planning to make any version updates on approved standards through the SVAP process.

Standard (and version)	None

Updated certification criteria and associated product	N/A
Health IT Module CHPL ID	N/A
Method used for standard update	N/A
Date of ONC-ACB notification	N/A
Date of customer notification (SVAP only)	N/A
Conformance measure	N/A
USCDI-updated certification criteria (and USCDI version)	N/A

Summary

Use Case Components

The use cases for our real-world testing plan are described below. Each use case contains:

- Associated ONC criteria
- Description of the measurement/metric
- Justification for the measurement/metric
- Expected outcomes in testing for the measurement/metric
- Care Settings and Number of Clinics to test

In each use case, we elaborate specifically on our justification for choosing the measure and the expected outcomes. All measurements were chosen to best evaluate compliance with the certification criteria and interoperability of exchanging electronic health information (EHI) within the certified EHR.

Testing Methodologies

For each measurement, a testing methodology is used. For our test plan, we use the following methodologies.

- Reporting/Logging: This methodology uses the logging or reporting capabilities of the EHR to examine functionality performed in the system. A typical example of this is the measure

reporting done for the automate measure calculation required in 315(g)(2), but it can also be aspects of the audit log or customized reports from the EHR.

- Survey: This methodology evaluates interoperability and compliance of EHR Module capabilities through feedback from users. This methodology can provide insight into how clinicians employ and use a feature which reveals actual value and impact of interoperability of the EHR Module.

Number of Clinics

Within each measure, we note the minimum number of clients or client sites we plan to use for this measure evaluation. The numbers vary depending on the methodology as well as overall use of the associated EHR Module criteria by our users. For criteria that are not widely used by our customer base, we may test the respective measure in our own production-sandbox environment given lack of customer experience with the criteria functionality.

2022 Real World Testing Use Cases

Use Case #1 Transition of Care CCDA and Clinical Reconciliation

Associated Criteria: 170.315(b)(1), 170.315(b)(2), 170.315(h)(1)

Measurement Description

During 3 months of testing period, we will track a sample of our users to create and send referrals/consultation letters with attached summary of care CCDA files to a 3rd party using direct messaging. Only a limited number of CCDA files with error will be sent by intention.

Meanwhile, we will also track down CCDAs received from 3rd parties incorporated into the patient record and then updating the patient's problem list, medication list, and medication allergy list with the clinical data contained in the CCDA.

Measurement Justification

iClinic Application supports the capabilities of send/receive the care/referral summaries from other certified health IT system. The goal of this approach is to demonstrate that both the interoperability and conformance capabilities of the certified health IT are consistent with the requirement of 170.315(b)(1), (b)(2) and (h)(1) certification criterion. This will be done through the test scenarios included in the plan. This measurement shows support for Direct Edge protocol in connecting to a HISP for successful transmission which reveals compliance to the associated criteria listed above. Through testing, we can also determine compliance to the associated criteria listed above in real world use. The number of CCDA files exchanged during the testing period will provide insight into how clinicians view both the use and value of this interoperability feature.

Expected Outcome

1) Providers or authorized users should be able to send and receive CCDA to/from external providers through direct messaging.

2) Providers or authorized users should be able to approve/accept CCDA received and perform the clinical reconciliation and incorporation data into patients' medical records.

Care Settings and Number of Clinics to test

We will test this use case in the general ambulatory sites that we support. A minimum of 3 clinics will be tested, which should be sufficient to cover functionalities used by most of our clients.

Use Case #2 Electronic Prescription

Associated Criteria: 170.315(b)(3)

Measurement Description

During 3 months of testing period, selected providers will performing electronic prescribing activities in their normal way. Meanwhile, they will be requested to search patients' medication history from time to time. The success rates of the following measures will be recorded:
Measure 1: Create new Rx and Refill
Measure 2: Change Rx
Measure 3: Cancel Rx
Measure 4: Refill Request
Measure 5: Receive fill status notifications (RXFILL)
Measure 6: Request and receive medication history information

Measurement Justification

MDLand iClinic Application supports eRx functionality to external pharmacies via Surescripts certified health IT system. The goal of this approach is to demonstrate that the Electronic Prescription can be successfully transmitted in conformance capabilities and requirement of 170.315(b)(3). This will be done through the test scenarios included in the plan.

Expected Outcome

Providers should be able to send electronic prescriptions successfully to pharmacies with all the features listed in the matric above.

Care Settings and Number of Clinics to test

We will test this use case in the general ambulatory sites that we support. A minimum of 3 clinics will be tested, which should be sufficient to cover functionalities used by most of our clients.

Use Case #3 Batch Patient Data Export

Associated Criteria: 170.315(b)(6)

Measurement Description

During 3 months of testing period, Providers will be requested to create data export requests and download resulted data files for at least 5 times at different date/time either real time or scheduled. The success rates of the following measures will be recorded:
Measure 1: Create data export request
Measure 2: Download resulted data files
Measure 3: Data files contain all the required data elements

Measurement Justification

MDLand iClinic Application supports batch CCDA export of multiple patients at a time.
The goal of this approach is to demonstrate that both the interoperability and conformance capabilities of the certified health IT are consistent with the requirement of 170.315(b)(6) certification criterion. This will be done through the test scenarios included in the plan

Expected Outcome

1) Authorized Users should be able to batch export patient CCDA files

2) Authorized Users should be able to specify the patient population by applying certain filters.

Care Settings and Number of Clinics to test

We will test this use case in the general ambulatory sites that we support. A minimum of 3 clinics will be tested, which should be sufficient to cover functionalities used by most of our clients.

Use Case #4 Quality Measures

Associated Criteria: 170.315(c)(1), 170.315(c)(2), 170.315(c)(3)

Measurement Description

This measure is tracking how many eCQM quality measures were successfully reported on by the EHR Module to CMS during their submission period for MIPS Quality reporting

Measurement Justification

MDLand iClinic Application supports the capabilities of recording, generating, and reporting CQM measures for all eligible patients and also enabling providers to import and calculate CQM measures for a list of patients The goal of this approach is to demonstrate that both the interoperability and conformance capabilities of the certified health IT are consistent with the requirement of 170.315(c)(1), (c)(2) and (c)(3) certification criteria. This will be done through the test scenarios included in the plan.

Expected Outcome

1) Providers or authorized users should be able to capture requirement data elements for selected CQM measures and export QRDA I

2) Providers or authorized users should be able to import QRDA I and recalculate selected measures

3) Providers or authorized users should be able to generate QRDA III CCDAs for reporting

Care Settings and Number of Clinics to test

We will test this use case in the general ambulatory sites that we support. A minimum of 3 clinics will be tested, which should be sufficient to cover functionalities used by most of our clients

Use Case #5 Patient Portal Use

Associated Criteria: 170.315(e)(1)

Measurement Description

This use case is tracking how patients are given access to their portal account over the testing period. During the testing period, Providers will be creating and sending clinical summaries to patient portal, whereas patients will be viewing, downloading, and transmitting the CCDA files received to a third party

Measurement Justification

MDLand iClinic Application supports the patient portal functionality, which allows patients to get access to their clinical summary documents and to download/transmit to a third party
The goal of this approach is to demonstrate that both the interoperability and conformance capabilities of the certified health IT are consistent with the requirement of 170.315(e)(1) certification criterion. This will be done through the test scenarios included in the plan

Expected Outcome

1) Providers or authorized users should be able to generate and send CCDA to patient portal

2) Patients should be able to access/view CCDA files and download/transmit the files

Care Settings and Number of Clinics to test

We will test this use case in the general ambulatory sites that we support. A minimum of 3 clinics will be tested, which should be sufficient to cover functionalities used by most of our clients

Use Case #6 Immunization Registries Use

Associated Criteria: 170.315 (f)(1)

Measurement Description

During 3 months of testing period, selected providers will be giving immunizations to patients in their normal way. The following measures will be recorded:
Measure 1: Create immunization
Measure 2: Upload immunization
Measure 3: Vaccine history (download)
Measure 4: Vaccine forecast

Measurement Justification

MDLand iClinic Application supports transmission of patient immunization records to state/city registries. The goal of this approach is to demonstrate that both the interoperability and conformance capabilities of the certified health IT are consistent with the requirement of 170.315(f)(1) certification criterion. This will be done through the test scenarios included in the plan.

Expected Outcome

Providers or authorized users should be able to exchange immunization information real-time with state/city registries with required fields

Care Settings and Number of Clinics to test

We will test this use case in the general ambulatory sites that we support. A minimum of 3 clinics will be tested, which should be sufficient to cover functionalities used by most of our clients

Use Case #7 API Access

Associated Criteria: 170.315 (g)(7), 170.315 (g)(8), 170.315 (g)(9)

Measurement Description

This use case is to track how outside systems or applications are connecting to iClinic via the Restful API with Transport Level Security Encryption (HTTPS). Providers who want to provide patient information to third party via the direct connection with iClinic EHR will be able to participate this test
Provider initiates the data exchange process by generating a user credential (Connection ID / Password) through iClinic web API, and delivers the user credential to third party. Third party software will be able to use the credential to query a validated patient's clinical data via the API provided by iClinic. API specification can be reviewed by the link: https://www.mdland.com/iClinicEHR/APIdocument

Pre-requirement 1: Ability to generate user credential via iClinic web API by a provider
Pre-requirement 2: Delivery of the user credential to third party (This step is not provided by MDLand. Provider and the third part will negotiate a secure way to exchange the user credential)

The following measures will be recorded:
Measure 1: Ability to create a secure connection with the third-party system by returning a patient ID based on a single patient information provided by third party system
Measure 2: Ability to responds to data category request from a third-party system and provide the single patient's clinical data on one category selected by a third-party system
Measure 3: Ability to provide the single patient's all-data requested from third-party systems

Measurement Justification

MDLand iClinic support the feature of RESTful API with Transport Layer Security encryption (HTTPS). All response messages are either in JSON or XML format. The goal of this approach is to demonstrate that both the interoperability and conformance capabilities of the certified health IT are consistent with the requirement of 170.315(g)(7)(8)(9) certification criteria. This will be done through the test scenarios included in the plan

Expected Outcome

1) Authorized third party user should be able to create secure connection with iClinic.EHR

2) Authorized third party user should be able to request/query a patient's clinical data on selected data category from iClinic EHR

3) Authorized third party user should be able to request/query a patient's clinical data on all data category from iClinic EHR

Care Settings and Number of Clinics to test

We will test this use case in the general ambulatory sites that we support. A minimum of 3 clinics will be tested, which should be sufficient to cover functionalities used by most of our clients

Version History

Version #	Date/Time	Created by	Notes
1.0	11/15/2021	Catherine Cai	Original