

2024 REAL WORLD TESTING RESULTS for MD LOGIC EHR

General Information

Developer Name: MD Logic, Inc. **Product Name(s):** MD Logic EHR **Version Number(s):** 7.2, 8.0

Certified Health IT Product List (CHPL)

ID(s): [15.04.04.2785.MDLo.07.02.1.221207](#), [15.04.04.2785.MDLo.08.03.1.231206](#)

Developer Real World Testing Page URL: www.mdlogic.com/solutions/real-world-testing

Summary of Testing Methods and Key Findings

Case management logs, system logs, and secure email logs were reviewed to determine the frequency of incoming data by type as well as the ability of the module to successfully read and incorporate the contained data. Log files obtained during Real World Testing were de-identified and used for analysis in several areas. Using live client environments, we established test APIs according to publicly available instructions and sent requests for patient data. The ability to receive requests and the accuracy of responses was catalogued and error rates tracked. Various test data was imported to and exported from these cloned systems and CQMs calculated and compared to expected results. Error rates were tracked and reviewed to offer additional explanations for possible data gaps.

Multiple certification criteria were tested simultaneously in this testing plan across two use cases. These metrics and use cases represent the specific interoperability scenarios relevant to the specialty care settings listed in our plan: provider to provider, provider to patient, patient to third party and provider to third party. Real World Testing demonstrated that MD Logic EHR is conformant to the required criteria

§ 170.315(b)(1) Transitions of Care,
§ 170.315(b)(2) Clinical Information Reconciliation and ,
§ 170.315(b)(3) Electronic Prescribing,
§ 170.315(b)(6) Data Export,
§ 170.315(c)(1) Record and Export,
§ 170.315(c)(2) Import and Calculate,
§ 170.315(c)(3) Report,
§ 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 and
§ 170.315(g)(9) Application Access –All Data Request.
§ 170.315(g)(10) Standardized API for Patient and Population Services

Our overall findings are that our systems function as intended. Any errors were the result of the unpredictability of the real-world use of these features and are not encountered while using standardized testing tools.

Standards Updates

Standard (and version)
Date of ONC-ACB notification (SVAP of USCDI)
Date of Customer Notification (SVAP only)
USCDI-updated criteria

Care Settings

The MD Logic EHR supports the documentation, tracking and sharing of interoperability data within and outside of specialty care settings. For the purposes of testing, our specialty care settings included: General Surgery, Plastic and Hand Surgery, Colon Rectal Surgery, ENT, Orthopedic Surgery, Podiatry and Neurosurgery.

Metrics and Outcomes

Use Case 1 (Single Patient) Metrics:

Measure 1: Sharing EHI

Catalogue mechanisms were used to share transitions of care documents, EHI and to track usage of the various transport mechanisms. These include transitions of care for patient referrals, transmitting data to be viewed by the patient via a patient portal and patient transmission of EHI data to a 3rd party.

Associated Criterion:

Certification Criteria	Requirement
§ 170.315(b)(1) Transitions of care	(i)(A) - send transitions of care (ii)(B) – display a human-readable C-CDA (iii)(A) – (F) - C-CDA includes the USCDI, Encounter diagnoses according to either ICD-10-CM or SNOMED CT® codes, Cognitive status, and Functional status, reason for referral, and the referring or transitioning provider’s name and office contact information. (iii)(G) – includes data for patient matching
§ 170.315(e)(1) View Download Transmit	(i)(A) – View transition of care/referral summaries (i)(B)(2) Download ambulatory summary or inpatient summary using CCD Template

	(i)(C) – Transmit to 3 rd party
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Relied Upon Software: Surescripts and ViewMyHealthRecords.com

Outcomes:

As the care settings in which this measure was tested consisted of specialty care providers, we expected that the number of outbound referrals sent via secure email would be low. In fact, among 10 client settings over the six-month testing period, only 5 outgoing referrals were sent using this method. This is a decrease over 2023. All were shared successfully, resulting in a 100% success rate. There were no errors.

The more frequent method of sharing EHI was by means of the patient portal (ViewMyHealthRecords.com). The tracked clients provided 8283 patients access to their health information via patient portal across the six month testing period. No issues were encountered related to the ability of patients to access their data or the readability of the data on ViewMyHealthRecords.com. During these same six months, 1073 patients viewed their health data a total of 3276 times. Nine patients then either downloaded their data or transmitted it to a 3rd party. No errors were logged or reported. As expected, transmission and readability were successful in all cases.

Challenges Encountered: N/A

Measure 2: Receiving and Incorporating EHI

Track the frequency of incoming CCDA documents via Direct protocol and manual import, and the success rate of incorporating information into the patient chart.

Associated Criterion:

Certification Criteria	Requirement
§ 170.315(b)(1) Transitions of care	(i)(B) - receive transitions of care (ii)(A) – detect valid and invalid ToC
§ 170.315(b)2 – Clinical information reconciliation and incorporation	(ii) - Properly match a received ToC to the correct patient. (iii)(B) - (D) - review, validate, and incorporate a patient’s medication list, allergies and intolerances list, and problem list.

Relied Upon Software: Surescripts Direct protocol

Outcomes:

A set of client systems were tracked over a six month testing period. Over that period, 3326 CCDA documents were received via Direct protocol. None were received via manual import. 3068 CCDA documents were successfully incorporated into the patients’ charts. Three clients encountered an error message claiming that properly filed CCDAs were not filed. This was a display error rather than a nonconformance. As we discovered the error, we promptly rectified the error for each client.

The discrepancy between the number of CCDAs received and those incorporated can otherwise be attributed to several factors, none of which indicate a nonconformance:

- duplicate CCDAs received
- CCDAs received for patients who were never seen
- patients for whom there was no attempt to reconcile the CCDA.
- some clients received CCDAs that had some different formatting that did not come up when testing standard test documents, we corrected the issue for those clients.

Challenges Encountered: N/A

Measure 3: Electronic Prescribing

Track the frequency of nonscheduled medications prescribed in the specialty care setting and the success rate of timely electronic transmission of those prescriptions.

Associated Criterion:

Certification Criteria	Requirement
§ 170.315(b)3 – Electronic Prescribing	(ii)(A) – send and receive the specified prescription transactions electronically (ii)(C) – send and receive the reason for the prescription

Relied Upon Software: Surescripts

Outcomes:

Our expectation was that 90% of electronic prescriptions would be successfully transmitted in a timely manner to NewCrop via Surescripts. Over the six-month testing period, 10 client systems generated 6029 electronic prescriptions, 5639 of which were successfully transmitted as expected, for a rate of 94%. While this number is as expected, we were correct in our expectation that the gap between the actual success rate and a perfect success rate was caused by user error and issues with the clearing house rather than system error or nonconformance.

We identified the following to be the primary causes of issues with submitting electronic prescriptions:

- Accidentally tried to prescribe a duplicate script to the same patient
- Prescribed a medication who’s NDC had recently expired and when the replacement was sent, original prescription was never deleted
- Attempted to send a controlled substance without have the appropriate subscription to send controlled substances electronically
- Prescriptions were documented in the system, but the intended facilities were unable to receive electronic prescriptions (i.e. nursing homes or other long-term care facilities)

- Several times during the reporting period, the prescription clearing house had issues classifying noncontrolled substances as controlled substances which caused issues for some clients

Challenges Encountered: N/A

Measure 4: Application Programming Interfaces

Assess the ability of an API to receive and respond to calls in accordance with the publicly available documentation.

Associated Criterion:

Certification Criteria	Requirement
§ 170.315 (g)7 – Application access – patient selection	(i) – receive a request with sufficient information to uniquely identify a patient and return an ID or token
§ 170.315 (g)8 – Application access – data category request	(i)(A) – respond to requests for patient data for each of the individual categories listed in the Common Clinical Data Set and return the full set of data for that category
§ 170.315 (g)9 – Application access – all data request	(i)(A) – respond to requests for patient data for all of the data categories at one time (i)(B) – respond to requests for patient data associated with a specific date and/or specific date range.
§ 170.315(g)10 – Standardized API for patient and population services	(i)(A) Respond to requests for a single patient’s data according to the standard (i)(B) Respond to requests for multiple patients’ data as a group according to the standard (ii)(A) Respond to search requests for a single patient’s data consistent with the search criteria included in the implementation specification (ii)(B) Respond to search requests for multiple patients' data consistent with the search criteria included in the implementation specification

Relied Upon Software: Inferno Test Tool

Outcomes:

We have received zero requests for API access that conformed to the certified standards. Internal testing was performed on select client systems with limited access to fictitious patients.

For § 170.315 (g)7-(g)9, on test client systems, we created a test user and gave access to particular patients. With these test systems, 24 individual data calls were made for individual and all category requests. In all cases the expected result was achieved as follows:

- Login With bad credentials
 - Http Status Result: 401 Unauthorized
- Login With Good credentials
 - Result: 200: OK
- Data Category with invalid category
 - Result: 400: Invalid Request
- Data Category with invalid access token
 - Result: 401: Unauthorized
- Data Category: Encounter
 - Result: 200: OK
- Data Category: Problem
 - Result: 200: OK
- Data Category: Procedures
 - Result: 200: OK
- Data Category: CareTeam
 - Result: 200: OK
- Data Category: Medications
 - Result: 200: OK
- Data Category: MedicationAllergies
 - Result: 200: OK
- Data Category: Immunizations
 - Result: 200: OK
- Data Category: Goals
 - Result: 200: OK
- Data Category: CarePlan
 - Result: 200: OK
- Data Category: VitalSigns
 - Result: 200: OK
- Data Category: SmokingStatus
 - Result: 200: OK
- Data Category: LabTests
 - Result: 200: OK
- Data Category: LabResults
 - Result: 200: OK
- Data Category: UniqueDeviceIds
 - Result: 200: OK
- Data Category: Assessment
 - Result: 200: OK
- Data Category: ReasonforReferral
 - Result: 200: OK

- Data Category: HealthConcerns
 - Result: 200: OK
- Data Category: FunctionalStatus
 - Result: 200: OK
- Data Category: CognitiveStatus
 - Result: 200: OK
- Data Category: All Data
 - Result: 200: OK
 - Result also includes CCDA document.

For § 170.315(g)10, the Inferno Test tool was used. All tests were run successfully.

Challenges Encountered: Due to lack of real-world usage of APIs by our clients, this measure was tested via simulations on live client systems. This was anticipated in our Real World Testing plan.

Additional Note: We did encounter a situation where a client’s partner system wanted to have the ability to extract data from our system. However, the API specifications were either too complex for their needs, or it did not have the data they wanted. In this case we ended up developing a custom routine for the client.

Use Case 2: Population Services

Measure 1: Data Export

Assess the ability of the Health IT to create an export summary for a set of patients with specified parameters as well as the usage of the feature.

Associated Criterion:

Certification Criteria	Requirement
§ 170.315(b)6 – Data Export	(i)(A) – set configuration options for data elements when creating export summaries (ii) – create export summaries using the Continuity of Care Document template (iii)(A) – set/enter date and time period (iv) – set storage location
§ 170.315(b)10 – Electronic Health Information Export	(i)(A) – Enable timely creation of an export file with all of a single patient’s EHI (i)(B) – User can export data at any time without developer (i)(D) – Export data electronically and in a computable format

Relied Upon Software: N/A

Outcomes:

We did not have any reported attempts by our test clients to export data. This was expected from our test plan.

Challenges Encountered: N/A

Measure 2: CQMs: Import

Assess the ability to import a QRDA I file and use the associated data to calculate CQMs.

Associated Criterion:

Certification Criteria	Requirement
§ 170.315(c)2 – Clinical Quality Measures - import and calculate	(i) – import QRDA Category I data file (ii) – calculate each CQM presented for certification.

Relied Upon Software: Cypress Test Tool

Outcomes:

As expected, we did not have any requests. Clones were made of client systems to test this functionality. Test data was created with the Cypress Test Tool and was imported into the test systems without issue.

Challenges Encountered:

As with previous years, due to lack of actual real-world test cases of clients needing to import QRDA1 files, we were forced to run simulations using a copy of real client data. A copy was used as to not contaminate a real working environment. This was expected and noted as a likely scenario in our Real World Testing plan, as we have not had any clients that have used the QRDA I import to date.

Measure 3: CQMs: Export

Assess the ability to accurately record data necessary for the calculation of CQMs, as well as the successful creation and export of QRDA I and QRDA III files utilizing that data.

Associated Criterion:

Certification Criteria	Requirement
§ 170.315(c)1 – Clinical Quality Measures - record and export	(i) – record all data necessary to calculate CQMs (ii) – export QRDA Category I data file
§ 170.315(c)3 – Clinical Quality Measures - report	Create QRDA Category III file for reporting

Relied Upon Software: Cypress Test Tool, Client Submissions

Outcomes:

§ 170.315(c)3 – Clinical Quality Measures-Report

Few of our Real World Testing client partners (and clients in general), are actively using eCQMs to submit their MIPS data. However, for the clients who are participating, data was exclusively gathered via documentation in MD Logic rather than via QRDA I import. In all client systems, CQMs were successfully calculated at the end of the measurement period and accurately reflected the data captured. In addition, QRDA III files were created successfully in all cases and were successfully exported and submitted for reporting MIPS. Any errors encountered were due to missing client data such as NPI or Tax ID numbers.

§ 170.315(c)1 – Clinical Quality Measures - Record and Export

Because none of these clients actively used the QRDA I export, we combined testing of this measure with our CQM Import testing using clones of live client systems. Multiple sets of test data were imported into these systems and the resulting CQM calculations effectively incorporated this information. CQMs included in this testing were 22, 50, 69, 117, 123, 131, 1134, 138, 139, 147, and 155. Updated QRDA I data was then exported from the clone environment without error in all cases.

Challenges Encountered:

As with the previous year. Due to lack of actual real-world test cases of clients needing to export QRDA1 files, we were forced to run simulations using a copy of real client data. A copy was used as to not contaminate a real working environment. This was expected and noted as a likely scenario in our Real World Testing plan, as we have not had any clients that have used the QRDA I export to date.