**REAL WORLD TESTING PLAN 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](http://www.mdlogic.com/solutions/real-world-testing)

**Justification for Real World Testing Approach**

At this time, MD Logic EHR is sold to specialty care settings, primarily in Orthopedics, Podiatry and Otolaryngology. A limited number of other specialties are also represented in the MD Logic client base, but for all practical purposes regarding interoperability, those settings are identical to the major specialties above. For this reason, this Real World Testing plan will apply to these specialty care settings, and client systems from which data is collected will accurately represent the makeup of our client base. Multiple certification criteria will be tested simultaneously in this testing plan across two use cases. These metrics and use cases were developed in order to best represent the specific interoperability scenarios relevant to the above specialty care settings: provider to provider, provider to patient, patient to third party, and provider to third party. Measures involving the sharing of information via CCDA between provider-patient, patient-third party or provider-provider, including § 170.315(b)(1) Transitions of Care, § 170.315(e)(1) View Download Transmit to a 3rd Party, and § 170.315(b)(2) Clinical Information Reconciliation and Incorporation, will be combined and tested via two measures. § 170.315(b)(3) Electronic Prescribing will be tested individually. Measure 170.315(b)(10) Electronic Health Information Export, will be tested using clones of client data as to not contaminate event logs that would indicate that patient data had been exported.? Measures involving Clinical Quality Measures § 170.315(c)(1), Record and Export, § 170.315(c)(2) Import and Calculate and Report § 170.315(c)(3) will be tested with a combined set of measures, in part on clones of client systems in order to minimize interference with live data. Though MD Logic is certified to API criteria, no current clients are utilizing the capability, so these measures: § 170.315(g)(7) Application Access – Patient Selection, § 170.315(g)(9) Application Access –All Data Request and § 170.315(g)(10) Standardized API for Patient and Population Services will be combined and measured in testing scenarios that mimic the type of real-world situations that are determined most likely to occur in the future.

**Standards Updates**

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| Standard (and version) | All standards versions are those specified in USCDI v1 |
| Date of ONC-ACB notification (SVAP of USCDI) | Not applicable |
| Date of Customer Notification (SVAP only) | Not applicable |
| USCDI-updated criteria | None |

**Care Settings**

The MD Logic EHR supports the documentation, tracking and sharing of interoperability data within and outside of specialty care settings (primarily Orthopedics, Otolaryngology and Podiatry)

**Overall Expected Outcomes**

Real World Testing will demonstrate that MD Logic EHR is conformant to the following certification criteria: § 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)(10) Electronic Health Information Exports, § 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)(9) Application Access –All Data Request and § 170.315(g)(10) Standardized API for Patient and Population Services.

**Schedule of Key Milestones:**

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| Key Milestone | Date/Timeframe |
| Release of documentation for the Real World Testing to be provided to authorized representatives and providers running MD Logic | Jan 1-February 2025 |
| Submit 2024 data | February 2025 |
| Selection of clients who will partner with us for capturing data | Feb-March 2025 |
| Revise and update test tracking and logging systems for accurate data collection | April-June 2025 |
| Meet with client partners to review and educate them on testing protocols | May 2025 |
| Begin collection of information as laid out by the plan for the period | July 1, 2025 |
| Follow-up with providers and authorized representatives on a regular basis to understand any issues arising with the data collection. | July 1-Sept 30, 2025 |
| End data collection for the testing period | September 30, 2025 |
| Analyze data and generate report | October-December 2025 |
| Submit Real World Testing report to Drummond Group (per their instructions) | February 2026 |

**Measures Used:**

The following outlines the measures that have been identified to best demonstrate conformance to multiple certification criteria concerning the sharing of EHI § 170.315(b)(1), § 170.315(b)(2), § 170.315(b)(3), § 170.315(b)(10), 170.315(b)(11), § 170.315(c)(1), § 170.315(c)(2), § 170.315(c)(3), § 170.315(e)(1), § 170.315(g)(7), § 170.315(g)(9) and § 170.315(g)(10) across the two use cases demonstrated (single patient and population services).

**Use Case 1 (Single Patient) Metrics**:

As part of the Real World Testing requirements for § 170.315(b)(1), § 170.315(b)(2), § 170.315(b)(3), § 170.315(e)(1), § 170.315(g)(7), § 170.315(g)(9) and § 170.315(g)(10), the developer has identified the following metrics for their testing plan:

Measure 1:  Sharing EHI

This measure will catalogue mechanisms used to share transitions of care documents and EHI, as well as 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 certification criteria for the case management system in a specialty care setting include:

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| 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 3rd party |

• Justification:  MD Logic EHR automatically generates CCDA for all patient visits, and this information can be sent via secure email using Direct protocol in conjunction with Surescripts for outbound referrals and also made available via patient portal (View My Health Records) for transmission to 3rd parties. This metric will provide information on usage rates of various transport methods and the successful display of all relevant EHI across settings.

• Test Methodology: Case management logs, system logs, and secure email logs will be reviewed to determine the frequency and the transport mechanism used by providers for sending transitions of care and the downloading or transmitting of EHI by patients using the patient portal. Log files obtained during Real World Testing will be de-identified and used for analysis in several areas to validate the proper creation of CCD documents, proper operation of the transport mechanisms, proper display of EHI, and error rates for each. This test methodology will primarily test the conformance of the implementation.

• Expected outcome(s): It is expected that providers and patients (or their authorized representatives) will be able to share EHI using the transmission mechanisms provided. Successful transmission is expected in all cases, with some margin for user error. Error rates will be tracked and trended over time and common causes identified and addressed.

Measure 2: Receiving and Incorporating EHI

This measure will 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 certification criteria for the case management system in a specialty care setting include:

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| 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. |

• Justification:  In a specialty setting, the ability to receive CCDA from external providers and incorporating the contained information into the patient record is of frequent necessity. This metric will provide data on the frequency of files received and the rate of successful incorporation.

• Test Methodology: Case management logs, system logs, and secure email logs will be 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 will be de-identified and used for analysis in several areas to validate the receipt of CCDA documents, frequency of attempted reconciliation, and proper display of EHI. Error rates will be tracked across time and common sources for error identified and addressed. This test methodology will primarily test the conformance of the implementation.

• Expected outcome(s): It is expected that a properly formatted CCDA should be successfully received and incorporated in all cases, and that user error rather than system error will be responsible for the majority of failures. Common user errors will be identified in order to improve user education.

Measure 3: Electronic Prescribing

This measure will track the frequency of nonscheduled medications prescribed in the specialty care setting and the success rate of timely electronic transmission of those prescriptions. Associated certification criteria for the case management system in a specialty care setting include:

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| 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 |

• Justification:  MD Logic EHR is capable of generating a prescription to send to NewCrop via Surescripts as well as to receive prescription information through the interface. Timely and error free transmission of prescription medication is vital for patient care. The measure will track medications through the process of prescribing, transmitting and recording in the patient’s health data.

• Test Methodology:  System logs will be used to compare prescribing rates with successful transmission rates. Errors will be logged and tracked over time. Log files obtained during Real World Testing will be de-identified and used for analysis in several areas to validate the accuracy and proper correlation of data between MD Logic EHR and New Crop.

• Expected Outcome(s):  It is expected that 90% of prescribed medications will be transmitted successfully within 24 hours of the visit, without error. Deviations from this expectation will be investigated and analyzed and it is anticipated that system error will account for only a small portion.

Measure 4: Application Programming Interfaces

This measure will assess the ability of an API to receive and respond to calls in accordance with the publicly available documentation. Associated certification criteria for the case management system in a specialty care setting include:

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| 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)(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 |
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• Justification:  Although MD Logic EHR has API capability certified to these criteria, no MD Logic clients are currently using API functionality to exchange EHI with third parties. However, it is important to ensure that the publicly available API documentation works as intended for any client who wishes to adopt it. For this reason, this measure will test all features of the API as documented to ensure their correct function, the ability of client systems to receive requests for data and respond with correct information. Because there are no active interfaces to test, we will establish our own interfaces with live production systems for the purpose of this measure

• Test Methodology: Using live client environments, we will establish test APIs according to publicly available instructions and send requests for patient data. Where possible, without compromising the testing, we will use dummy patients, and any real patient data gathered will be de-identified. The ability to receive requests and the accuracy of responses will be catalogued and error rates tracked.

• Expected Outcome(s):  It is expected that MD Logic will be able to receive and accurately respond to all properly formatted requests for patient data. Deviations from this expectation will be analyzed and addressed.

Measure 5: Decision Support Interventions

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| Certification Criteria | Requirement |
| **§ 170.315(b)(11) – Decision Support Interventions** | (i) – Decision Support Intervention interaction  (ii) – Decision Support Configuration  (iii) – Intervention Selection  (iv) – Source Attributes  (v) – Source attribute access and modification  (vi) – Intervention Risk Management |

• Justification:

Effective decision support mechanisms are critical for quality and efficiency of patient care and avoiding adverse events. For evidence-based interventions, MD Logic provides a basic list of interventions and the ability to generate rules that can be triggered by entering patient health information. Authorized end users can create their own rules and provide source information of any interventions they wish to use.

For predictive based interventions MD Logic does not have a self-authored tool, so for the purposes of this measure we will be specifically testing MD Logic supplied evidence-based interventions and user-generated rules.

 • Test Methodology:

MD Logic is newly certified to this requirement, and we do not currently have any system logs that track the use of these mechanisms. While we work to provide client education on the use of these systems, we will primarily rely on direct testing on live systems. If provided, user reported feedback will also be taken into account.

We will configure client systems with pre-determined intervention rules that cover all required demographic and health data categories, and enable a test user for all intended functionality as required by the certification criteria. As the test user, we will then attempt to modify rules and their corresponding source attributes, enable and disable interventions, generate interventions when modifying health data for test patients, and provide feedback once the rules have been triggered.

 • Expected Outcome(s):  It is expected that interventions will trigger successfully in 100% of cases and that end users will be capable of modifying all attributes of the intervention rules without issue. Deviations from this expectation will be analyzed and addressed.

• Expected Outcome(s):  It is expected that that interventions will trigger successfully and that end users will be capable of modifying all attributes of the intervention rules. Separately we expect API functionality to work properly and that an end user is capable of enabling access to whatever external tool they wish to use.

**Use Case 2: Population Services**

As part of the Real World Testing requirements for § 170.315(c)(1), § 170.315(c)(2), and § 170.315(c)(3), the developer has developed the following metrics for their testing plan:

Measure 1: Data Export

This measure will 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 certification criteria for the case management system in a specialty care setting include:

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| Certification Criteria | Requirement |
| **§ 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 |

• Justification:  While the data export functionality of MD Logic is infrequently used, it is a valuable tool to ensure the portability of EHI. This metric will provide information on the accurate creation of data exports and other EHI exports for a set of patients in order to assess the ease and accuracy of data portability and interoperability.

• Test Methodology:  Case management logs and system logs will be reviewed to determine the frequency of usage of data exports, EHI exports as well as the success rate. Test scenarios will be used to supplement an expected low usage, in order to provide a data pool large enough for the assessment of accuracy and error rates in generating data export and export summaries. Dummy patients will be used where possible in these test scenarios, but all data will be de-identified and used to analyze the frequency, success, and accuracy of use.

• Expected Outcome(s):  It is expected that a relative low usage rate will be found in live environments. The usage rate will be tracked and trended over time. We expect that a combination of real and test data will demonstrate that data exports and EHI exports are accurately generated and exported without issue. Error rates will be tracked and analyzed.

Measure 2: CQMS: Import

This measure will assess the ability to import a QRDA I file and use the associated data to calculate CQMs.  Associated certification criteria for the case management system in a specialty care setting include:

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| 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. |

• Justification:  As of the drafting of this plan, no MD Logic client has ever imported or requested assistance importing a QRDA I file. It is important that we are able to accurately assess the conformity of the MD Logic EHR with this criterion without affecting the accuracy of live patient data. This metric will measure the accuracy of CQM calculation from test data imported via QRDA I file as well as track and evaluate errors in the process.

• Test Methodology:  In order to avoid contamination of live patient data with test data, a set of client systems representative of a variety of specialty care settings will be cloned. Various test data will be imported into these cloned systems and CQMs calculated and compared to expected results.

• Expected Outcome(s):  It is expected that QRDA I files will be imported without issue and that CQMs will be calculated as predicted based on the imported data. Error rates for the import process as well as any deviations in CQM calculation from the expected results will be tracked and analyzed.

Measure 3: CQMs: Export

This measure will 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 certification criteria for the case management system in a specialty care setting include:

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| 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 |

• Justification:  It is vital that relevant information is being properly captured, recorded, and used in the calculation of CQMs for providers that participate in MIPS. QRDA I files for export and QRDA III files for reporting purposes should be generated and exported easily and accurately. This measure will provide information on the accuracy of data capture from various sources as well as the ability to format CQMs into QRDA I and QRDA III files and perform successful exports. In order to avoid corrupting real data, these measurements will be performed using clones of live environments.

• Test Methodology:  Using clones of live environments, baseline data will be established and new, known information input into the health IT through various available means. CQMs will then be calculated and compared to expected results. This data will then be used to perform exports in QRDA I and QRDA III formats, and error rates tracked and analyzed.

• Expected Outcome(s):  Relevant health data will be accurately captured and used to correctly calculate CQMs. Deviations will be tracked and analyzed. In addition, it is expected that QRDA I files should be generated and exported without issue, as should QRDA III files for reporting. Error rates will be tracked and analyzed.

**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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**Date: 10/29/2024**