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# MediFusion

## 2024 Real World Testing Plan

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## Executive Summary

This is the real world test plan for 2024 for Medifusion certified EHR solution. It provides the real world test measurements and metrics that meet the intent and objectives of ONC's Condition of Certification and Maintenance of Certification requirement for real world testing (§ 170.405 Real world testing) to evaluate compliance with the certification criteria and interoperability of exchanging electronic health information (EHI) within the care and practice setting which it is targeted for use.

As ONC has stated in its rule, "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 have worked toward this objective in designing our test plan and its subsequent real world testing measurements and metrics. This document 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 our testing methodology for the measure/metric we plan to employ. We also include the associated ONC criteria, our justification for measurement selection, our expected outcomes from the testing, the care settings applied for this measure, and if applicable the number of clients to use in our real world testing. We have included our timeline and milestones for completing the real world testing in 2024, and information about compliance with the Standards Version Advancement Process updates. A table of contents is provided later in the plan quick access to any document section, including the testing measurements and metrics found at the end of this document. Our signed attestation of compliance with the real world testing requirements is on the following page.

## 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

**Plan Report ID Number:** 20231130mdf

**Developer Name:** [MediFusion, LLC](#)

**Certified Health IT Criteria:** 315(b)(1), (c)(1)-(3), (e)(1), (f)(1)-(3), (g)(7), (g)(9), (b)(2), (b)(7),(b)(8), (h)(1), (g)(10), (b)(10).

**Product Name(s):** [MediFusion](#)

**Version Numbers(s):** [V 2.0](#)

**Product List (CHPL) ID(s) and Link(s):**

- [15.05.05.3102.MEDF.01.00.1.220228](#)
- <https://chpl.healthit.gov/#/listing/10845>

**Real Worl Testing Plans URL:** <https://www.medifusion.com/real-world-testing>

## Timeline and Milestones for Real World Testing CY 2024

- 1Q-2024: Begin communication with clients to ask for their support and participation in real world testing. The goal is to have a sufficient number of clients committed for real world testing by the end of 1Q-2024.
- 2Q-3Q 2024. During the 2nd and 3rd quarter of CY 2024, the real world testing with clients will be scheduled and performed. It is expected that a preparatory call will be done with clients to prepare them for testing activities. Results will be documented in the test results section of the test methods and ultimately used to build the test report. If any non-compliances are observed, we will notify the ONC-ACB of the findings and make the necessary changes required.
- 4Q-2024. During the last quarter of the year, the CY 2024 real world test plan will be completed according to ONC and ONC-ACB requirements and expectations. Test plan will be prepared for submission before the end of the year.
- 1Q-2025. Results will be Submitted to SLI by 01/15/2025

## Standards Version Advancement Process (SVAP) Updates

For CY 2024, 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	None
Health IT Module CHPL ID	None
Method used for standard update	None
Date of ONC-ACB notification	None
Date of customer notification (SVAP only)	None
Conformance measure	None
USCDI-updated certification criteria (and USCDI version)	None

## Real World Testing Measurements

The measurements for our real world testing plan are described below. Each measurement contains:

- Associated ONC criteria
- Testing Methodology used
- Description of the measurement/metric
- Justification for the measurement/metric
- Expected outcomes in testing for the measurement/metric
- Number of client sites to use in testing (if applicable)
- Care settings which are targeted with the measurement/metric

In each measurement evaluate, we elaborate specifically on our justification for choosing this 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. This methodology often provides historical measurement reports which can be accessed at different times of the year and evaluate interoperability of EHR functionality, and it can serve as a benchmark for evaluating real world testing over multiple time intervals.

**Compliance with Reporting Metric or Scoring Tool:** This methodology uses inspection to evaluate if EHR is supporting to the ONC criteria requirements in interoperability compliance. It can be done through 1-v-1 inspection testing and utilizing various tools to measure or evaluate compliance and interoperability. It either includes tool which produces a quantifiable result or uses specific metrics to evaluation real world interoperability.

## Number of Clients Sites

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.

## Care and Practice Settings Targeted

Our EHR is targeted to general ambulatory practices, and our measures were design for this setting in mind.



## **RWT Measure #1. Number of Transition of Care C-CDAs Successfully Sent**

**Associated Criteria:** 315(b)(1)

**Testing Methodology:** Reporting/Logging

### **Measurement Description**

This measure is tracking and counting how many C-CDAs are created and successfully sent from the EHR Module to a 3rd party via Direct messaging during a transition of care event over the course of a given interval.

The interval for this measure will be three (3) months.

Relied upon software is EMR Direct

### **Measurement Justification**

This measure will provide a numeric value to indicate both the how often this interoperability feature is being used as well as its compliance to the requirement. An increment to this measure indicates that the EHR can create a C-CDA patient summary record, including ability to record all clinical data elements, and by sending the C-CDA patient summary record, the EHR demonstrates successful interoperability of an exchanged patient record with a 3rd party. This measurement shows support for Direct Edge protocol in connecting to a HISP for successful transmission.

### **Measurement Expected Outcome**

The measurement will produce numeric results over a given interval. We will utilize various reports and audit logs, including Automated Measure (315.g.2) reports, to determine our measure count.

A successful measure increment indicates compliance to the underlying ONC criteria. It will show that the EHR can create the C-CDA patient summary record, including record required clinical data elements. In sending the C-CDA patient summary record, the EHR will demonstrate ability to confirm successful interoperability of an exchanged patient record with a 3rd party, including support for Direct Edge protocol in connecting to a HISP. Successfully completing this measure also implies users have a general understanding of the EHR functional operations for this EHR Module and an overall support for the user experience while not completing this measure may indicate lack of understanding or possibly lack of use or need for this functionality.

The expected outcomes will be measured using a monthly report derived from Cerner's Healthcare Intelligence analytics product for the sending and receiving of C-CDA document and will provide successful active engagement in the sample of customer production environments. For the validation criteria, the outcomes will be measured by a unique monthly report that reflects across all customers the count of C-CDAs that are in error. For the display criteria, the outcomes will be measured by a unique monthly report derived from the Advanced Interoperability Service (AIS) that reflects the instances of customers that have modified their preferences. Overall, outcomes anticipated are high volumes of utilization of the certified capabilities reflecting successful implementation and use of certified software in the real world.

### **Real World Testing Metrics**

1. Number of standards-conformant C-CDA documents created per month by C-CDA document template (CCD, Referral Note, Discharge Summary)
2. Number of times per month a C-CDA document was opened and viewed utilizing the certified C-CDA viewer capability
3. Number of times per month the C-CDA validator capability was leveraged to assess the standards conformance of a C-CDA being viewed

### **Care Settings and Number of Clients Site to Test**

We designed this measure to test the general ambulatory setting that we support and target. We will test a minimum of two (2) client practice(s). This number covers a sufficient percentage of existing practices to provide a viable sample of users of the certified EHRs.

## **RWT Measure #2. Number of Quality Measures Successfully Reported on to CMS**

Associated Criteria: 315(c)(1)-(c)(3)

Testing Methodology: Reporting/Logging

### **Measurement Description**

This measure is tracking and counting how many eCQM quality measures were successfully reported on by the EHR Module to CMS over the course of a given interval.

The interval for this measure will be twelve (12) months.

### **Measurement Justification**

This measure will provide a count and list of electronic clinical quality measures (eCQMs) which are calculated and submitted to CMS for a given program, like MIPS. Clinical quality measures are only used for the respective CMS programs and any production measures should utilize submission to CMS. Because CQM criteria, 315(c)(1)-(c)(3), all work collectively together in the eCQM functionality of the EHR Module, this measurement is used for all three.

### **Measurement Expected Outcome**

The measurement will a count and list of eQMs submitted to CMS over a given interval. We will utilize various reports and audit logs to determine our measure count.

A successful measure submission indicates compliance to the underlying ONC criteria. It will show that the EHR can do calculations on the eQm and that they are accepted by CMS. Successfully completing this measure also implies users have a general understanding of the EHR functional operations for this EHR Module and an overall support for the user experience while not completing this measure may indicate lack of understanding or possibly lack of use or need for this functionality.

RWT outcomes for the Millennium (CQMs) certified HIT module will consist of successful QRDA file submission to CMS and TJC across the tracked customers. More specifically, for Eligible Hospitals, Cerner reports display the measure outcomes for each qualifying encounter and the aggregated outcome count for the quarter. The encounter could have an outcome assigned of Initial Population, Denominator, Denominator Exclusion, Numerator, or Exception. The aggregated count will include a total for each of the outcomes. These counts should match CMS/TJC submission reports. For Eligible Clinician measures, the QRDA III Cerner audit report matches the submission detail report generated by the Cerner Quality Clearinghouse. The following outcomes are evaluated: Patient population, Denominator, Denominator Exclusion, Numerator, Exception, Performance rate, Medicare Population (Denominator), and Tax Identification Number (TIN) counts. The validation of the expected outcome correlates to successful real world use of the certified capabilities.

### **Real World Testing Metrics**

1. CQM – record and export criterion: percentage of selected patients for whom QRDA files are successfully generated (target = 100%)
2. CQM – import and calculate: percentage of patient data successfully imported (target = 90%)
3. CQM – report criterion: percentage of successful QRDA file subm

### **Care Settings and Number of Clients Site to Test**

We designed this measure to test the general ambulatory setting that we support and target. We will test a minimum of two (2) client practice(s). This number covers a sufficient percentage of existing practices to provide a viable sample of users of the certified EHRs.

## **RWT Measure #3. Number of Patients Given Access to Portal**

Associated Criteria: 315(e)(1)

Testing Methodology: Reporting/Logging

**Relied Upon Software:** Chrony NTP/3.4

### **Measurement Description**

This measure is tracking and counting how many patients are given login access to their patient portal account over the course of a given interval.

The interval for this measure will be three (3) months.

### **Measurement Justification**

This measure will provide a numeric value to indicate how often this interoperability feature is being used. An increment to this measure indicates that the EHR can supply patient health data to the patient portal and provide an account for the patient to use in accessing this data.

### **Measurement Expected Outcome**

The measurement will produce numeric results over a given interval. We will utilize various reports and audit logs, including Automated Measure (315.g.2) reports, to determine our measure count.

A successful measure increment indicates compliance to the underlying ONC criteria. It will show that the EHR can submit patient health data to the patient portal on a regular and consistent basis as well provide an account for the patient to use in accessing this data. Successfully completing this measure also implies users have a general understanding of the EHR functional operations for this EHR Module and an overall support for the user experience while not completing this measure may indicate lack of understanding or possibly lack of use or need for this functionality.

The outcomes Cerner expects to observe from the HealthLife RWT plan include high volume of frequently used VDT capabilities within the product. The volume of unique users will reflect the number of persons that were enabled to interact with the electronic health data for themselves and others within a given timeframe. Volume for the events of viewing is expected to be greater than the events for downloading and transmitting health records as view actions are considered primary use of HealthLife and more accessible/user-friendly functions. Download and transmit features in HealthLife are accessed less frequently and thus will have a lower volume of events.

### Real World Testing Metrics

1. Number of unique HealthLife users that viewed an element of the health record during the measurement period
2. Number of total combined viewing events of the health record during the measurement period
3. Number of unique HealthLife users that downloaded or transmitted an HL7® CDA® C-CDA Continuity of Care Document (CCD) during the measurement period
4. Number of unique HealthLife users that viewed Access Logs during the measurement period
5. Number of total viewing events of Access Logs during the measurement period

### Care Settings and Number of Clients Site to Test

We designed this measure to test the general ambulatory setting that we support and target. We will test a minimum of two (2) client practice(s). This number covers a sufficient percentage of existing practices to provide a viable sample of users of the certified EHRs.

## RWT Measure #4. Number of Electronic Reportable Lab Messages Successfully Sent

Associated Criteria: 315(f)(3)

Testing Methodology: Reporting/Logging

### Measurement Description

This measure is tracking and counting how many electronic reportable messages are created and successfully sent from the EHR Module to a public health registry over the course of a given interval.

The interval for this measure will be three (3) months.

### Measurement Justification

This measure will provide a numeric value to indicate both the how often this interoperability feature is being used as well as its compliance to the requirement. An increment to this measure indicates that the EHR can create an electronic reportable lab message, including ability to record all clinical data elements, and by sending the message, the EHR demonstrates successful interoperability with a public health registry.

### **Measurement Expected Outcome**

The measurement will produce numeric results over a given interval. We will utilize various reports and audit logs, to determine our measure count.

A successful measure increment indicates compliance to the underlying ONC criteria. It will show that the EHR can create the HL7 electronic reportable lab record, including ability to record the required clinical data elements. In sending the ELR message, the EHR will demonstrate ability to confirm successful interoperability with a public health registry. Successfully completing this measure also implies users have a general understanding of the EHR functional operations for this EHR Module and an overall support for the user experience while not completing this measure may indicate lack of understanding or possibly lack of use or need for this functionality.

The expected outcomes of the RWT plan will be that the test sample customers generate and transmit information for their reportable laboratory results successfully on a daily-basis during the test period. This will provide proof of “active engagement” with public health registries as required for customers who rely on the certified capabilities as part of measurement under the Centers’ for Medicare and Medicaid Services’ (CMS) Promoting Interoperability programs

### **Real World Testing Metrics**

1. Percentage of successful daily reportable laboratory results transactions for sample customers across the 30-day selected measurement period (target = 85%+)

### **Care Settings and Number of Clients Site to Test**

We designed this measure to test the general ambulatory setting that we support and target. We will test a minimum of two (2) client practice(s). This number covers a sufficient percentage of existing practices to provide a viable sample of users of the certified EHRs.

## **RWT Measure #5. Compliance of C-CDA Error Detection**

Associated Criteria: 315(b)(1)

Testing Methodology: Compliance with Reporting Metric

**Relied Upon Software:** EMR Direct

### **Measurement Description**

This measure is tracking compliance of the EHR Module criteria functionality of detecting errors within a received or imported C-CDA.

### **Measurement Justification**

This measure will provide assurance of compliance to the EHR Module criteria, specifically ability to detect any conformance or vocabulary standard errors of a received or imported in CCDA.

C-CDA error detection provides assurance to the user of the validity of received or imported in C-CDAs which is both a certification requirement and supports interoperability within production setting. The error detection will give a quantifiable and numeric result to evaluate real world interoperability.

To avoid disclosing PHI, we will only work with test patients from the actual production environment or an appropriately production-mirrored environments to best evaluate production capabilities available to end users.

### **Measurement Expected Outcome**

The user will import in, either through upload or inbound messages, C-CDAs with different known errors. The user will use the EHR functions to parse the C-CDA document and perform errors detection which will be reviewed by the user. We will confirm the process and steps done by the user meet the criteria requirements of the EHR Module and works as expected in production-type environment.

The expected outcomes will be measured using a monthly report derived from Cerner's Healthcare Intelligence analytics product for the sending and receiving of C-CDA document and will provide successful active engagement in the sample of customer production environments. For the validation criteria, the outcomes will be measured by a unique monthly report that reflects across all customers the count of C-CDAs that are in error. For the display criteria, the outcomes will be measured by a unique monthly report derived from the Advanced Interoperability Service (AIS) that reflects the instances of customers that have modified their preferences. Overall, outcomes anticipated are high volumes of utilization of the certified capabilities reflecting successful implementation and use of certified software in the real world.

### **Real World Testing Metrics**

1. For the sending and receiving of C-CDA documents, number of patient visits for which a C-CDA document was either received or sent (target 50%+)
2. For the validation of C-CDA documents, the rate of C-CDA documents received inbound with any error (target less than 25%)
3. For the validation capabilities system settings, number of customers who have changed their display settings during the measurement period (target less than 5%)

### **Care Settings and Number of Clients Site to Test**

We designed this measure to test the general ambulatory setting that we support and target. We will test with either a minimum of one (1) client practice(s) or use internal resources if necessary to evaluate this measure. This number covers a sufficient percentage of existing practices to provide a viable sample of users of the certified EHRs.

## **RWT Measure #6. Problem/Medication/Allergy Incorporation from C-CDA – C-CDA Scorecard Quantifiable Result**

Associated Criteria: 315(b)(2)

Testing Methodology: Scoring Tool

### **Measurement Description**

This measure is tracking compliance of the EHR Module criteria functionality of incorporating problem/medication/allergy from a C-CDA and doing a quantifiable evaluation using the ONC CCDA Scorecard tool.

### **Measurement Justification**

This measure will provide assurance of compliance to the EHR Module criteria, specifically ability to select the appropriate patient and then incorporate the problems, medications, and allergies values into the patient record.

Incorporating external clinical data into the patient record is critical for patient care, and this measure will give assurance of compliance of this functionality.

This measure will also query the patient's C-CDA and evaluate it against the ONC C-CDA Scorecard tool. The C-CDA scorecard is designed for production use and measures how artifacts created by health IT compare against the HL7 C-CDA implementation guide and HL7 best practices.

To avoid disclosing PHI, we will only work with test patients from the actual production environment or an appropriately production-mirrored environments to best evaluate production capabilities available to end users.

### **Measurement Expected Outcome**

Upon receipt of the C-CDA document, the EHR should allow the user to identify the correct patient the document is to be associated with, incorporate the document into the patient record, and merge and reconcile the problems, medications, and medication allergies into their respective lists. We will also confirm the process and steps done by the user meet the criteria requirements of the EHR Module and works as expected in production as in a controlled test environment.

After this is done, the user will query the C-CDA of the patient record and will run the C-CDA through the Scorecard tool to obtain a result to give us a numeric and quantifiable value to evaluate interoperability compliance.

Expected outcomes include general consistency across months throughout the year for overall reconciliation actions (including both add and reject actions). This provides assurances that the certified capabilities are serving our customers' needs on a day-to-day basis without significant issues and/or interruptions. We also expect to observe higher volumes of reconciliation actions for Problems and Medications than for Allergies. This is expected as most patients are more likely to have a higher number



of Medications and Problems than they would have Allergies, which will naturally result in more actions for those concepts

### **Real World Testing Metrics**

1. Total number of Problems added and rejected per month
2. Total number of Allergies added and rejected per month
3. Total number of Home Medications added and rejected per month

Note: all reconciliation actions being tracked are taken on external data parsed from HL7 CDA C-CDA documents received inbound.

### **Care Settings and Number of Clients Site to Test**

We designed this measure to test the general ambulatory setting that we support and target. We will test with either a minimum of one (1) client practice(s) or use internal resources if necessary to evaluate this measure. This number covers a sufficient percentage of existing practices to provide a viable sample of users of the certified EHRs.

## **RWT Measure #7. Immunization Message – Number of Compliant Conformance Statements and Errors Detected**

Associated Criteria: 315(f)(1)

Testing Methodology: Scoring Tool

### **Measurement Description**

This measure is tracking compliance of the EHR Module criteria functionality of creating an immunization message.

### **Measurement Justification**

This measure will provide assurance of compliance to the EHR Module criteria, specifically ability to record immunization admission information on a patient and create an immunization message which can be delivered to a public health registry.

To avoid disclosing PHI, we will only work with test patients from the actual production environment or an appropriately production-mirrored environments to best evaluate production capabilities available to end users.

### Measurement Expected Outcome

The user will use the EHR functions to document immunization information typical to their workflow including vaccination name, dosage amount, lot number, manufacturer name, and any other required elements. Then, the user will use the EHR functions to produce the HL7 VXU immunization message according to the ONC standards.

We will inspect the message to confirm compliance with the required standard. We will also confirm the process and steps done by the user meet the criteria requirements of the EHR Module and works as expected in production as in a controlled test environment.

We will also use a test tool to produce a numeric count of number of successful compliances as well as errors to evaluate real world interoperability.

Through the identified RWT methodology, we anticipate observing high volume daily use of certified capabilities in production environments by our customers. We also anticipate that the success rates of transactions for both the submission and query capabilities will indicate that immunizations data is being successfully exchanged on a consistent basis with a broad range of partner IIS registries.

### Real World Testing Metrics

1. Estimated number of production domains live with query and reporting capabilities to any IIS during the measurement period
2. Volume of successful queries (QBPs) initiated to an IIS over the measurement period
3. Success rate for submissions (VXUs) to any valid endpoint using our certified standards-conformant HL7® v2.5.1 messaging interface over the measurement period (target = 90%)
4. Registration staff did not accurately capture patient demographics, or patient was unwilling/unable to provide information necessary to successfully match a patient during query (e.g., mother's maiden name)
5. Clinician misdocuments vaccine details during administration (e.g., incorrect lot number)
6. Network connectivity issues or failures on the endpoint's end resulting in inability to accept valid requests

**Note:** 10% failure rate for metric #3 accounts for intermittent failures beyond the system's control, such as:

### Care Settings and Number of Clients Site to Test

We designed this measure to test the general ambulatory setting that we support and target. We will test with either a minimum of one (1) client practice(s) or use internal resources if necessary to evaluate this measure. This number covers a sufficient percentage of existing practices to provide a viable sample of users of the certified EHRs.

## **RWT Measure #8. Syndromic Surveillance Message – Number of Compliant Conformance Statements and Errors Detected**

Associated Criteria: 315(f)(2)

Testing Methodology: Scoring Tool

### **Measurement Description**

This measure is tracking compliance of the EHR Module criteria functionality of creating a syndromic surveillance message.

### **Measurement Justification**

This measure will provide assurance of compliance to the EHR Module criteria, specifically ability to record syndromic surveillance information and create a syndromic surveillance message which can be delivered to a public health registry. To avoid disclosing PHI, we will only work with test patients from the actual production environment or an appropriately production-mirrored environments to best evaluate production capabilities available to end users.

### **Measurement Expected Outcome**

The user will use the EHR functions to document clinical data which produce an electronic reportable lab message typical to the user's workflow and clinical documentation (e.g., influenza). After completing the encounter, the EHR will create HL7 Syndromic Surveillance ADT message regarding the patient's diagnosis which would be sent to the public health registry. We will inspect the message to confirm compliance with the required standard. We will also confirm the process and steps done by the user meet the criteria requirements of the EHR Module and works as expected in production as in a controlled test environment. We will also use a test tool to produce a numeric count of number of successful compliances as well as errors to evaluate real world interoperability.

The results of the RWT plan will indicate the successful ongoing transmission of the HL7 transactions to the target DOH. It shall demonstrate the test sample customers actively and successfully generate and send information for their ED patients during the test period. This includes admissions (A01), discharges (A03), and ED registrations (A04), as well as any update transactions (A08) specific to data reported for syndromic surveillance for the patients included in the reporting test period. This approach will show successful "active engagement" with public health registries as required for customers who rely on the certified capabilities as part of measurement under the Centers for Medicare and Medicaid Services' (CMS) Promoting Interoperability programs

### **Real World Testing Metrics**

1. Percentage of successful daily syndromic surveillance transactions (A01, A04 – ED, A03, A08) for sample customers across the 30-day selected measurement period (target = 85%+)

### Care Settings and Number of Clients Site to Test

We designed this measure to test the general ambulatory setting that we support and target. We will test with either a minimum of one (1) client practice(s) or use internal resources if necessary to evaluate this measure. This number covers a sufficient percentage of existing practices to provide a viable sample of users of the certified EHRs.

## RWT Measure #9. API Resource Query Support – C-CDA Scorecard Quantifiable Result

Associated Criteria: 315(g)(7) , (g)(9) and (g)(10)

Testing Methodology: Scoring Tool

### Measurement Description

This measure is tracking compliance of the EHR Module criteria functionality of support of API query of patient data resources.

### Measurement Justification

This measure will provide assurance of compliance to the EHR Module criteria, specifically ability to connect to the EHR's API resources and query patient clinical data through the API. This measure will also query the patient's C-CDA through the API and evaluate it against the ONC C-CDA Scorecard tool. The C-CDA scorecard is designed for production use and measures how artifacts created by health IT compare against the HL7 C-CDA implementation guide and HL7 best practices.

Because API criteria, 315(g)(7) , (g)(9) , (g)(10), all work collectively together in the API functionality of the EHR Module, this measurement is used for all three.

To avoid disclosing PHI, we will only work with test patients from the actual production environment or an appropriately production-mirrored environments to best evaluate production capabilities available to end users.

### Measurement Expected Outcome

The user connects to the EHR through a client application via the API and is prompted for credentials and authentication according to the EHR's publicly available API documented specification. After supplying the correct credentials, the EHR returns a valid ID or token for the API Client to access the patient data. The user will query the patient clinical data resources via the API and receive access to them through the client application.

Next, the user will query the C-CDA of the patient record and will run C-CDA through the Scorecard tool to obtain a result to give us a numeric and quantifiable value to evaluate interoperability compliance.

We will also confirm the process and steps done by the user meet the criteria requirements of the EHR Module and works as expected in production as in a controlled test environment.

Expected outcomes for the Millennium (Clinical) certified APIs RWT execution will include high volumes of successful API transactions across all of the live production endpoints. This would be observed on a daily basis showing application usage for the certified APIs. Additionally, we anticipate that volumes of transactions will vary widely across individual FHIR resources based on the types of U.S. Core Data for Interoperability (USCDI) data that is more commonly requested by popular apps today. For example, volumes for the Observation resource will be significantly higher than any other resource. For HL7 FHIR Bulk Data export we anticipate seeing fairly low volumes of overall activity given the general novelty status of the capabilities. Production activity observed will likely

### Real World Testing Metrics

1. (g10) Single Patient – Success rate of HL7 FHIR API transactions observed across all customer production activity for the 2024 calendar year (target = 98%+)
2. (g10) Bulk Data – Count of customers completing a HL7 FHIR Bulk Data extraction during the 2024 calendar year (no target)
3. (g9) C-CDA – Success rate of events returning a C-CDA document in a HL7 FHIR API response (no target)
4. (g7) – Count of successful access events for access token being granted to a patient (no target)

### Care Settings and Number of Clients Site to Test

We designed this measure to test the general ambulatory setting that we support and target. We will test with either a minimum of one (1) client practice(s) or use internal resources if necessary to evaluate this measure. This number covers a sufficient percentage of existing practices to provide a viable sample of users of the certified EHRs.

## RWT Measure #10. Direct Project

Associated Criteria: 315(h)(1)

Relied Upon Software: EMR Direct

### Measurement Description

- Demonstration of creation of a C-CDA at the end of an ambulatory encounter with transmission to the next provider of care via Direct Messaging with a confirmation of receipt in a client production environment .
- Spot check of evidence of successful C-CDA transmissions in the client's production environment from the timeline Tab with referral option selected.
- Demonstration of the ability to receive a C-CDA via Direct messaging into the Inbound Documents Queue and save it into the EHR.

### **Measurement Justification**

- To demonstrate the ability to send C-CDAs to the next provider of care via Direct Messaging upon ambulatory visit departure.
- To demonstrate the ability to receive C-CDAs from external sources via Direct Messaging upon patient arrival as an admission, in transition or inbound referral.

### **Measurement Expected Outcome**

- Documentation evidencing receipt of C-CDAs into recipient EHRs when sent by the client via Direct Messaging statuses in timeline
- Documentation evidencing receipt of external C-CDAs into the client's EHR via Direct messaging into the Inbound External Documents Queue.
- The expected outcomes for our RWT plan are that nearly all messaging activity across the measurement period is successfully processed within an hour. We also expect the system downtime % to be consistently very low indicating high system reliability. Overall, these expected outcomes show that the system works for its intended purposes and provides our customers with a high level of confidence in the capabilities

### **Real World Testing Metrics**

1. Percentage of inbound and outbound messages processed in less than 1 hour over the Q1-Q3 2024 measurement period (target  $\geq 99.9\%$ )
2. Overall system uptime over the Q1-Q3 2024 measurement period (target  $\geq 99.9\%$ )

### **Care Settings and Number of Clients Site to Test**

We designed this measure to test the general ambulatory setting that we support and target. We will test with either a minimum of one (1) client practice(s) or use internal resources if necessary to evaluate this measure. This number covers a sufficient percentage of existing practices to provide a viable sample of users of the certified EHRs.

## **RWT Measure #11. Data Segmentation Send**

Associated Criteria: 315(b)(7)

### **Measurement Description**

Total number of protected C-CDA documents successfully sent via Direct messaging with MDN ACK message status

### **Measurement Justifications**

- To demonstrate the volume of protected C-CDAs successfully transmitted via Direct messaging.

### **Measurement Expected Outcome**

- Identification of standard/baseline aggregated volume of transmission of protected C-CDA documents by month.

### **Care Settings and Number of Clients Site to Test**

We designed this measure to test the general ambulatory setting that we support and target. We will test with either a minimum of one (1) client practice(s) or use internal resources if necessary to evaluate this measure. This number covers a sufficient percentage of existing practices to provide a viable sample of users of the certified EHRs.

## **RWT Measure #12. Data Segmentation Receive**

Associated Criteria: 315(b)(8)

### **Measurement Description**

Total number of protected C-CDA documents successfully received via Inbound Direct messaging.

### **Measurement Justification**

- To demonstrate the volume of protected C-CDAs received into the client database inbound External Documents Queue.

### **Measurement Expected Outcome**

- Identification of standard/baseline aggregated volume of received protected C-CDA documents by month.

### **Care Settings and Number of Clients Site to Test**

We designed this measure to test the general ambulatory setting that we support and target. We will test with either a minimum of one (1) client practice(s) or use internal resources if necessary to evaluate this measure. This number covers a sufficient percentage of existing practices to provide a viable sample of users of the certified EHRs.